# PROGRAMS (R-1 RDT&E



Department of Defense Budget for Fiscal Years 1998/1999

February 1997

#### Preface

The R. D. T. & E. Programs (R-1) exhibit is derived from and consistent with the DoD Future Years Defense Program R. D. T. & E. Annex data base.

transmittal by the President of the Budget of the United States Government. This document is also provided The R-1 is provided annually to the DoD oversight committees of the Congress coincident with the to OASD (PA) for use by non-DoD activities.

Office of the Under Secretary of Defense (Comptroller)

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### Department of Defense. FY 1998/1999 R D T & E Program

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| Summary                                                        |            |            | Date: FEB 1997       | B 1997.    |
|----------------------------------------------------------------|------------|------------|----------------------|------------|
|                                                                |            |            | Thousands of Dollars |            |
|                                                                | FY 1996    | FY 1997    | FY 1998              | FY 1999    |
| Summary By Appropriation Research Development Test & Eval Army | 4,757,412  | 4,930,628  | 4,510,843            | 4,496,724  |
| Research Development Test & Eval Navy                          | 8,471,501  | 7,855,754  | 7,611,022            | 7,756,314  |
| Research Development Test & Eval AF                            | 12,512,814 | 14,068,836 | 14,451,379           | 13,799,985 |
| Research Development Test & Eval Defwide                       | 9,192,442  | 9,438,171  | 089'690'6            | 8,689,353  |
| Developmental Test & Eval, Defense                             | 247,082    | 275,792    | 268,183              | 278,767    |
| Operational Test & Evaluation, Defense                         | 22,587     | 24,219     | 23,384               | 23,447     |
| Total Research, Development, Test & Evaluation                 | 35,203,838 | 36,593,400 | 35,934,491           | 35,044,590 |

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Department of Defense FY 1998/1999 R D T & E Program

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| Summary                                           |            |            | Date: FEB    | 3 1997     |
|---------------------------------------------------|------------|------------|--------------|------------|
|                                                   |            |            | Thousands of | of Dollars |
|                                                   | FY 1996    | FY 1997    | FY 1998      | FY 1999    |
| Summary Recap of Budget Activities Basic Research | 1,099,189  | 1,079,789  | 1,163,672    | 1,212,090  |
| Applied Research                                  | 2,835,891  | 2,873,082  | 2,814,085    | 3,025,018  |
| Advanced Technology Development                   | 3,609,005  | 3,799,612  | 3,414,173    | 3,455,652  |
| Demonstration and Validation                      | 5,197,372  | 5,668,774  | 5,567,376    | 5,200,038  |
| Engineering and Manufacturing Development         | 8,644,875  | 8,848,988  | 8,548,760    | 7,954,040  |
| RDI&E Management Support                          | 3,654,292  | 3,164,235  | 3,085,282    | 3,071,144  |
| Operational Systems Development                   | 10,163,214 | 11,158,920 | 11,341,143   | 11,126,608 |
| Total Research, Development, Test & Evaluation    | 35,203,838 | 36,593,400 | 35,934,491   | 35,044,590 |
| Summary Recap of FYDP Programs                    | 131,793    | 126,563    | 191,190      | 245,009    |
| General Purpose Forces                            | 3,206,041  | 3,021,715  | 2,904,427    | 2,570,930  |
| Intelligence and Communications                   | 6,365,128  | 7,663,948  | 8,019,315    | 7,814,633  |
| Mobility Forces                                   | 16,826     | 79,923     | 133,295      | 218,774    |
| Research and Development (FYDP Program 6)         | 25,112,583 | 25,302,037 | 24,362,526   | 23,772,257 |
| Central Supply and Maintenance                    | 191,374    | 214,755    | 107,646      | 146,376    |
| Training Medical and Other                        | 1,009      | 1,781      | 1,427        |            |
| Administration and Assoc Activities               | 14,718     | 36,859     | 40,853       | 41,741     |
| Support of Other Nations                          | 17,364     | 3,554      | 55,269       | 118,530    |
| Special Operations Forces                         | 147,002    | 142,265    | 118,543      | 116,340    |
| Total Research, Development, Test & Evaluation    | 35,203,838 | 36,593,400 | 35,934,491   | 35,044,590 |

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### Department of the Army FY 1998/1999 R D T & E Program

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| Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           |               | Date: FEB 1997       | B 1997      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|----------------------|-------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |               | Thousands of Dollars | f Dollars   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | FY 1996   | FY 1997       | FY 1998              | FY 1999     |
| Summary Recap of Budget Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           |               |                      |             |
| Basic Research                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 181,722   | 179,059       | 198,854              | 210,349     |
| Applied Research                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 450,837   | 551,558       | 462,935              | 493,665     |
| Advanced Technology Development                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 580,033   | 577,676       | 418,322              | 431,696     |
| Demonstration and Manufacturing Development                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1,124,738 | 1,141,159     | 1,107,393            | 1,162,925   |
| RDT&E Management Support                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1,234,657 | 1,072,165     | 1,136,576            | 1,108,382   |
| Operational Systems Development                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 730,971   | 750,761       | 663,368              | 643,876     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           | 1 1 1 1 1 1 1 |                      |             |
| Total Research Development Test & Eval Army                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4,757,412 | . 4,930,628   | 4,510,843            | 4,496,724   |
| Summary Recap of FYDP Programs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |               |                      |             |
| U)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4,000     | 26,376        | 86,193               | 134,298     |
| General Purpose Forces                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 560,107   | 541,129       | 403,355              | 354,129     |
| Intelligence and Communications                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 64,814    | 72,633        | 89,316               | 68,413      |
| Research and Development (FYDP Program 6)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4,094,970 | 4,242,671     | 3,874,153            | . 3,874,693 |
| Central Supply and Maintenance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 23,699    | 47,819        | 44,326               | 50,086      |
| Administration and Assoc Activities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 322       |               | 6                    | 100         |
| Support of Other Nations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 000,6     |               | 13,300               | COTICT      |
| material Association of the Control | 1 757 113 | 4 020 628     | A 510 843            | ACT AGA A   |
| Total Research Development Test & Eval Army                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 912/10/14 | 040 / 000 / # | 1 0 TO 1 O TO 1 P    | 11.1004.4   |

# Department of the Army FY 1998/1999 R D T & E Program

Þ 52,966 U 30,281 U 18,151 U 24,002 U 24,287 U 33,360 U 37,598 U 6,691 U 5,204 U 22,374 U 19,213 U 10,979 U 30,613 U 8,170 15,828 141,555 19,682 FY 1999 210,349 Thousands of Dollars Exhibit R-1 Date: FEB 1997 4,739 4,786 FY 1998 15,113 7,242 22,335 21,059 33,112 26,980 20,192 138,165 45,576 198,854 9,811 19,294 27,282 16,528 33,317 17,304 4,497 7,981 21,898 29,144 39,913 2,259 22,246 24,351 179,059 15,510 20,652 34,312 FY 1997 14,393 119,739 3,065 14,530 16,636 44,927 19,351 26,675 5,603 17,853 14,651 17,535 19,466 35,040 34,647 1,728 24,297 FY 1996 13,657 121,822 46,243 181,722 9,858 4,857 16,442 Act Chemical, Smoke and Equipment Defeating Technolog Appropriation: 2040 A Research Development Test & Eval Army In-House Laboratory Independent Research University and Industry Research Centers Combat Vehicle and Automotive Technology Sensors and Electronic Survivability Electronics and Electronic Devices Modeling and Simulation Technology Joint Service Small Arms Program Weapons and Munitions Technology Defense Research Sciences Night Vision Technology Ballistics Technology Materials Technology Aviation Technology Missile Technology EW Technology TRACTOR ROSE TRACTOR HIP Basic Research 0601102A 0601104A 0602104A 0602618A 0602624A 0601101A 0602105A 0602120A 0602122A 0602211A 0602270A 0602303A 0602308A 0602601A 0602622A 0602623A 0602705A 0602709A Program Element Number Line 4 ß 9 œ 6 10 11 17 18 12 13 16 14 No

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| Ttem                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Appr       | Appropriation: | Appropriation: 2040 A Research Development Test & Eval Army |     |         | 1       | Date: FEB 1997 | 1997       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|-------------------------------------------------------------|-----|---------|---------|----------------|------------|
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            | Drogram        |                                                             |     |         |         | Thousands of   | of Dollars |
| 1,372   Countermine Systems   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372   1,372 | Line<br>No |                | Item                                                        | Act | FY 1996 | FY 1997 | FY 1998        | FY 1999 G  |
| Human Factors Engineering Technology   25,537   15,968   1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19         |                | Countermine Systems                                         | 7   |         | 7,372   | 10,598         | 10,715 U   |
| 0602720A         Environmental Quality Technology         25,537         55,178         1           0602782A         Command, Control, Communications Technology         2         13,130         14,976         1           0602783A         Computer and Software Technology         2         3,843         6,500         1           0602784A         Military Engineering Technology         2         26,995         21,319         3           0602786A         Malitary Engineering Technology         2         26,995         21,319         7           0602786A         Logistics Technology         2         70,575         104,332         7           0602787A         Medical Technology         2         70,575         104,332         7           0602787A         ARWY Artificial Intelligence Technology         2         70,575         104,332         7           0602787A         ARWY Artificial Intelligence Technology         3         2,054         2,179         7           0603001A         Aration Advanced Technology         3         38,820         22,724         3           0603002A         Aviation Advanced Technology         3         26,363         28,311         3           0603006A         Weapons and Munitions Advanced Technol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 20         |                | Human Factors Engineering Technology                        | 7   | 15,445  | 15,968  | 14,256         | 15,626 U   |
| 0602782A         Command, Control, Communications Technology         2         13,130         14,976         1           0602783A         Computer and Software Technology         2         3,843         6,500         3           0602784A         Military Engineering Technology         2         33,734         38,060         3           0602785A         Manpower/Personnel/Training Technology         2         7,254         9,329         3           0602786A         Logistics Technology         2         26,995         21,319         7           060278A         Ambower/Personnel/Training Technology         2         70,575         104,332         7           060278A         Amany Artificial Intelligence Technology         2         70,575         104,332         7           060278A         Amany Artificial Intelligence Technology         2         70,575         104,332         7           0603001A         Amation Advanced Technology         3         38,820         22,724         3           0603003A         Aviation Advanced Technology         3         26,363         28,811         3           0603006A         Combat Vehicle and Automotive Advanced Technology         3         29,313         29,379         1           060                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 21         |                |                                                             | 7   | 25,537  | 55,178  | 17,519         | 13,869 U   |
| 0602783A         Computer and Software Technology         2         3,843         6,500           0602784A         Military Engineering Technology         2         33,734         38,060         38           0602785A         Manpower/Personnel/Training Technology         2         7,254         9,329         104,332           0602786A         Logistics Technology         2         26,995         21,319         7           0602786A         Medical Technology         2         70,575         104,332         7           0602786A         ARMY Artificial Intelligence Technology         2         2,054         2,179         7           Applied Research         ARMY Artificial Intelligence Technology         3         38,820         2,179         7           0603001A         Medical Advanced Technology         3         48,320         551,558         46           0603003A         Aviation Advanced Technology         3         48,320         56,165         3           0603004A         Weapons and Munitions Advanced Technology         3         29,132         29,132           0603005A         Combat Vehicle and Automotive Advanced Technology         3         29,333         29,339           0603006A         Combat Vehicle and Automotive Advanced Tec                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 22         |                |                                                             | 7   | 13,130  | 14,976  | 16,838         | 18,180 U   |
| 0602784A         Military Engineering Technology         2         33,734         38,060           0602785A         Manpower/Personnel/Training Technology         2         7,254         9,329           0602786A         Logistics Technology         2         26,995         21,319         11           0602787A         Medical Technology         2         70,575         104,332         7           0602787A         Medical Technology         2         2,054         2,179         7           Applied         Research         450,837         551,558         46           0603001A         Logistics Advanced Technology         3         8,820         22,724         3           0603003A         Aviation Advanced Technology         3         48,320         56,165         3           0603005A         Aviation Advanced Technology         3         26,363         28,811         3           0603005A         Aviation Advanced Technology         3         26,363         28,811         3           0603005A         Combat Vehicle and Automotive Advanced Technology         3         26,363         29,333         29,333           0603007A         Archhology         Technology         3         4,576         4,406 <td>23</td> <td></td> <td>Computer and Software Technology</td> <td>7</td> <td>3,843</td> <td>6,500</td> <td>679</td> <td>337 U</td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 23         |                | Computer and Software Technology                            | 7   | 3,843   | 6,500   | 679            | 337 U      |
| 0602786A         Manpower/Personnel/Training Technology         2         7,254         9,329           0602786A         Logistics Technology         2         26,995         21,319         1           0602787A         Medical Technology         2         70,575         104,332         7           0602787A         Medical Technology         2         2,179         2,179         7           0602789A         ARMY Artificial Intelligence Technology         3         2,054         2,179         7           0603001A         Logistics Advanced Technology         3         38,820         22,724         3           0603002A         Medical Advanced Technology         3         48,320         56,165         3           060300A         Aviation Advanced Technology         3         26,363         29,112         1           060300A         Weapons and Munitions Advanced Technology         3         26,363         29,312         1           060300A         Weapons and Munitions Advanced Technology         3         26,363         29,379         1           060300A         Technology         4,406         4,406         4,406         16,791         1           060300A         Technology         3         23,01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 24         |                |                                                             | 7   | 33,734  | 38,060  | 36,422         | 40,112 U   |
| 0602786A         Logistics Technology         2         26,995         21,319         1           0602787A         Medical Technology         2         70,575         104,332         7           0602789A         ARMY Artificial Intelligence Technology         2         2,054         2,179                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 25         |                | Manpower/Personnel/Training Technology                      | 73  | 7,254   | 9,329   | 9,014          | D 610'6    |
| 602787A         Medical Technology         2         70,575         104,332         7           6602789A         ARMY Artificial Intelligence Technology         2,054         2,179                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 26         |                | Logistics Technology                                        | 7   | 26,995  | 21,319  | 17,689         | 18,565 U   |
| APPLIED         ARMY Artificial Intelligence Technology         2,054         2,179           Applied         Research         450,837         551,558         46           0603001A         Logistics Advanced Technology         3         38,820         22,724         3           0603002A         Medical Advanced Technology         3         48,320         56,165         3           0603004A         Weapons and Munitions Advanced Technology         3         29,119         29,122         1           0603005A         Command, Control, Communications Advanced Technology         3         26,363         28,811         3           0603007A         Manpower, Personnel and Training Advanced Technology         3         4,576         4,406         4           1cchnology         Technology         3         25,323         29,379         1           0603007A         Technology         3         23,016         16,791         1           1cchnology         Technology         3         23,016         16,791         1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 27         |                | Medical Technology                                          | 7   | 70,575  | 104,332 | 74,684         | 75,307 U   |
| Applied Research         450,837         551,558         46           0603001A         Logistics Advanced Technology         3 8,820         22,724         3           0603002A         Medical Advanced Technology         3 90,591         201,198         1           0603003A         Aviation Advanced Technology         3 48,320         56,165         3           0603004A         Weapons and Munitions Advanced Technology         3 29,119         29,122         1           0603005A         Combat Vehicle and Automotive Advanced Technology         3 26,363         28,811         3           0603006A         Command, Control, Communications Advanced         3 26,363         29,379         1           0603007A         Manpower, Personnel and Training Advanced         3 4,576         4,406           Technology         Technology         3 23,016         16,791         1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 28         |                | ARMY Artificial Intelligence Technology                     | 73  | 2,054   | 2,179   | 1,255          | 1,330 U    |
| 0603001A         Logistics Advanced Technology         3 8,820         22,724         3           0603002A         Medical Advanced Technology         3 48,320         56,165         3           0603003A         Aviation Advanced Technology         3 29,119         29,122         1           0603005A         Combat Vehicle and Automotive Advanced Technology         3 26,363         28,811         3           0603006A         Command, Control, Communications Advanced Technology         3 29,323         29,379         1           0603007A         Manpower, Personnel and Training Advanced Technology         3 4,576         4,406           Technology         TRACTOR HIKE         3 23,016         16,791         1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            | Applied R      | esearch                                                     |     | 450,837 | 551,558 | 462,935        | 493,665    |
| 0603002A         Medical Advanced Technology         3         90,591         201,198         1           0603003A         Aviation Advanced Technology         3         48,320         56,165         3           0603004A         Weapons and Munitions Advanced Technology         3         29,119         29,122         1           0603005A         Combat Vehicle and Automotive Advanced Technology         3         26,363         28,811         3           0603006A         Command, Control, Communications Advanced Technology         3         29,323         29,379         1           0603007A         Manpower, Personnel and Training Advanced Technology         3         4,576         4,406           0603009A         TRACTOR HIKE         3         23,016         16,791         1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 29         |                | Logistics Advanced Technology                               | m   | 38,820  | 22,724  | 35,469         | 32,197 U   |
| 0603003A         Aviation Advanced Technology         3         48,320         56,165         3           0603004A         Weapons and Munitions Advanced Technology         3         29,119         29,122         1           0603005A         Command, Control, Communications Advanced Technology         3         26,363         28,811         3           0603006A         Technology Manpower, Personnel and Training Advanced Technology Technology         3         4,576         4,406           0603009A         TRACTOR HIKE         3         23,016         16,791         1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 30         |                | Medical Advanced Technology                                 | m   | 90,591  | 201,198 | 10,677         | 10,959 U   |
| 0603004A         Weapons and Munitions Advanced Technology         3         29,119         29,122         1           0603005A         Combat Vehicle and Automotive Advanced Technology         3         26,363         28,811         3           0603006A         Command, Control, Communications Advanced Technology         3         29,323         29,379         1           0603007A         Manpower, Personnel and Training Advanced Technology         3         4,576         4,406           06033009A         TRACTOR HIKE         3         23,016         16,791         1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 31         |                | Aviation Advanced Technology                                | m   | 48,320  | 56,165  | 31,330         | 29,921 U   |
| 0603005A         Combat Vehicle and Automotive Advanced Technology         3         26,363         28,811         3           0603006A         Command, Control, Communications Advanced         3         29,323         29,379         1           Technology         Technology         4,576         4,406           0603009A         TRACTOR HIKE         3         23,016         16,791         1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 32         |                | Weapons and Munitions Advanced Technology                   | ю   | 29,119  | 29,122  | 18,255         | 29,717 U   |
| 0603006A Command, Control, Communications Advanced 3 29,323 29,379 1 Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 33         |                | Combat Vehicle and Automotive Advanced Technology           | m   | 26,363  | 28,811  | 32,685         | 59,573 U   |
| 0603007A Manpower, Personnel and Training Advanced 3 4,576 4,406<br>Technology 3 23,016 16,791 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 34         |                | Command, Control, Communications Advanced                   | ю   | 29,323  | 29,379  | 19,688         | 20,911 U   |
| 0603009A TRACTOR HIKE 3 23,016 16,791                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 35         |                | Personnel                                                   | ю   | 4,576   | 4,406   | 3,003          | з,006 п    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 36         |                | TRACTOR HIKE                                                | m   | 23,016  | 16,791  | 14,350         | 9,574 U    |

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### Department of the Army FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation:    | Appropriation: 2040 A Research Development Test & Eval Army |     |         |         | Date: FEB 1997 | 1997      |
|------|-------------------|-------------------------------------------------------------|-----|---------|---------|----------------|-----------|
|      |                   |                                                             | ;   |         |         | Thousands of   | Dollars   |
| Line | Element<br>Number | Item                                                        | Act | FY 1996 | FY 1997 | FY 1998        | FY 1999 C |
| 37   | 0603013A          | TRACTOR DIRT                                                | m   | 1,713   | 3,265   | 3,393          | 2,448 U   |
| 38   | 0603017A          | TRACTOR RED                                                 | я   | 5,369   | 8,445   | 5,572          | 4,953 U   |
| 39   | 0603020A          | TRACTOR ROSE                                                | ĸ   | 4,731   | 4,971   | 9,204          | 9,111 U   |
| 40   | 0603105A          | Military HIV Research                                       | e   | 2,795   | 17,544  | 2,713          | 3,162 п   |
| 41   | 0603238A          | Global Surveillance/Air Defense/Precision Strike            | e   | 37,630  | 22,009  | 11,664         | 4,926 U   |
| 42   | 0603270A          | EW Technology                                               | ю   | 3,818   | 6,651   | 8,182          | 11,754 U  |
| 43   | 0603313A          | Missile and Rocket Advanced Technology                      | m   | 109,972 | 99,819  | 117,139        | 89,542 U  |
| 44   | 0603322A          | TRACTOR CAGE                                                | e   | 8,088   | 8,651   | 6,412          | 5,353 U   |
| 45   | 0603606A          | Landmine Warfare and Barrier Advanced Technology            | e   | 25,006  | 27,629  | 19,332         | 19,778 U  |
| 46   | 0603607A          | Joint Service Small Arms Program                            | ъ   | 4,516   | 9,049   | 4,754          | 5,148 U   |
| 47   | 0603654A          | Line-Of-Sight Technology Demonstration                      | e   | 13,396  | 9,791   | 13,000         | 20,000 U  |
| 48   | 0603710A          | Night Vision Advanced Technology                            | m   | 31,142  | 29,761  | 19,299         | 19,250 U  |
| 49   | 0603734A          | Military Engineering Advanced Technology                    | m   | 14,544  | 20,213  | 12,231         | 17,334 U  |
| 20   | 0603772A          | Advanced Tactical Computer Science and Sensor<br>Technology | ю   | 27,185  | 21,282  | 19,970         | 23,079 U  |
|      | Advanced          | Advanced Technology Development                             |     | 580,033 | 677,676 | 418,322        | 431,696   |
| 51   | 0603018A          | TRACTOR TREAD                                               | 4   | 14,158  | 2,329   |                | Þ         |
| 52   | 0603308A          | Army Missile Defense Systems Integration (Dem/Val           | 4   | 23,443  | 66,462  | 24,138         | 12,637 U  |
| 53   | 0603619A          | Landmine Warfare and Barrier - Adv Dev                      | 4   | 35,768  | 27,860  | 18,882         | 11,214 U  |
| 54   | 0603627A          | Smoke, Obscurant and Target Defeating Sys-Adv Dev           | 4   | 2,623   | 6,246   |                | Þ         |

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# Department of the Army FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | tion:                                   | A Research Dev                                    |      |                                                |         | Date: FEB 1997       | 1997      |
|------|-----------------------------------------|---------------------------------------------------|------|------------------------------------------------|---------|----------------------|-----------|
| 1    | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 111111111111111111111111111111111111111           | <br> | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |         | Thousands of Dollars |           |
| Line | Program<br>Element<br>Number            | Item                                              | Act  | FY 1996                                        | FY 1997 | FY 1998              | FY 1999 C |
| 55   | 0603639A                                | Armament Enhancement Initiative                   | 4    | 58,227                                         | 63,240  | 40,313               | 18,982 U  |
| 56   | 0603640A                                | Artillery Propellant Development                  | 4    | 20,811                                         | 8,322   | 8,521                | n         |
| 57   | 0603645A                                | Armored System Modernization - Adv Dev            | 4    | 181,647                                        | 7,803   | 2,007                | 2,008 U   |
| 28   | 0603649A                                | Engineer Mobility Equipment Advanced Development  | 4    | 13,591                                         |         |                      | D         |
| 59   | 0603653A                                | Advanced Tank Armament System (ATAS)              | 4    | 9,335                                          | 11,395  | 8,982                | 8,928 U   |
| 9    | 0603713A                                | Army Data Distribution System                     | 4    | 6,360                                          | 23,170  | 21,214               | 10,049 U  |
| 61   | 0603745A                                | Tactical Electronic Support Systems - Adv Dev     | 4    | 5,630                                          | 3,941   |                      | Þ         |
| 62   | 0603747A                                | Soldier Support and Survivability                 | 4    | 6,709                                          | 6,541   | 7,557                | 7,680 U   |
| 63   | 0603766A                                | Tactical Electronic Surveillance System - Adv Dev | 4    | 26,796                                         | 25,354  | 20,920               | 23,714 U  |
| 64   | 0603774A                                | Night Vision Systems Advanced Development         | 4    | 3,167                                          | 2,769   | 2,939                | 2,893 U   |
| 65   | 0603790A                                | NATO Research and Development                     | 4    |                                                | 9,755   | 13,168               | 11,169 U  |
| 99   | 0603801A                                | Aviation - Adv Dev                                | 4    | 12,893                                         | 13,104  | 7,132                | 7,450 U   |
| 67   | 0603802A                                | Weapons and Munitions - Adv Dev                   | 4    | 949                                            |         |                      | Þ         |
| 9    | 3 0603804A                              | Logistics and Engineer Equipment - Adv Dev        | 4    | 5,587                                          | 7,433   | 6,783                | 6,833 U   |
| 69   | 0603805A                                | Combat Service Support Control System Evaluation  | 4    | 13,228                                         | 12,689  | 7,673                | 7,783 U   |
| 70   | 0603807A                                | and Analysis<br>Medical Systems - Adv Dev         | 4    | 9,878                                          | 966'6   | 6,765                | 8,700 U   |
| 7.1  | L 0603851A                              | TRACTOR CAGE (Dem/Val)                            | 4    | 3,234                                          | 3,001   | 1,948                | 1,627 U   |
| 72   | 0603854A                                | Artillery Systems - Dem/Val                       | 4    |                                                | 238,590 | 324,380              | 294,495 U |
| 73   | 3 0603856A                              | SCAMP Block II Dem/Val                            | 4    |                                                | 8,250   | 73                   | л 699'6   |
| 74   | 1 0603889A                              | Counterdrug RDT&E Projects                        | 4    | 420                                            |         |                      | Þ         |
|      | Demonstra                               | Demonstration and Validation                      |      | 454,454                                        | 558,250 | 523,395              | 445,831   |
|      |                                         |                                                   |      |                                                |         | Page A-4             |           |

Department of the Army FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation: | Appropriation: 2040 A Research Development Test & Eval Army |     |                                         |                                         | Date: FEB            | 1997       |
|------|----------------|-------------------------------------------------------------|-----|-----------------------------------------|-----------------------------------------|----------------------|------------|
|      | Drogram        |                                                             |     |                                         |                                         | Thousands of Dollars |            |
| Line |                |                                                             | :   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                      | () ()      |
| No   | Number         | Item                                                        | Act | FY 1996                                 | FY 1997                                 | FY 1998              | FY 1999 c  |
| 75   | 0604201A       | Aircraft Avionics                                           | 5   | 20,073                                  | 14,694                                  | 21,669               | 12,729 U   |
| 16   | 0604220A       | Armed, Deployable OH-58D                                    | ហេ  | 688                                     | 1,130                                   |                      | Þ          |
| 77   | 0604223A       | Comanche                                                    | Ŋ   | 284,131                                 | 331,424                                 | 282,009              | 371,927 U  |
| 78   | 0604270A       | EW Development                                              | 22  | 62,250                                  | 73,886                                  | 66,212               | 51,490 U   |
| 79   | 0604321A       | All Source Analysis System                                  | ιΩ  | 49,912                                  | 39,308                                  | 24,045               | 26,228 U   |
| 80   | 0604325A       | Follow-on to TOW                                            | S   | 944                                     | 5,479                                   | 13,949               | 50,884 U   |
| 81   | 0604328A       | TRACTOR CAGE                                                | 2   |                                         | 1,524                                   | 11                   | 303 П      |
| 82   | 0604604A       | Medium Tactical Vehicles                                    | 2   | 2,923                                   | 5,874                                   | 3,729                | Þ          |
| 83   | 0604609A       | Smoke, Obscurant and Target Defeating Sys-Eng Dev           | 70  | 1,915                                   |                                         |                      | 703 U      |
| 84   | 0604611A       | JAVELIN                                                     | r)  | 2,249                                   | 6,014                                   | 8,018                | 5,277 U    |
| 85   | 0604619A       | Landmine Warfare                                            | ro. | 29,453                                  | 26,288                                  | 19,800               | 23,075 U   |
| 86   | 0604622A       | Family of Heavy Tactical Vehicles                           | ın  | 2,605                                   | 1,958                                   |                      | D          |
| 87   | 0604633A       | Air Traffic Control                                         | S   | 5,073                                   | 7,377                                   | 1,705                | 1,729 U    |
| 88   | 0604640A       | Advanced Command and Control Vehicle (AC2V)                 | Ŋ   | 17,306                                  | 7,734                                   | 8,867                | D          |
| 8    | 0604641A       | Tactical Unmanned Ground Vehicle (TUGV)                     | Ŋ   |                                         | 2,823                                   | 2,687                | 2,663 U    |
| 06   | 0604642A       | Light Tactical Wheeled Vehicles                             | ហ   | 3,970                                   | 2,937                                   | 606'6                | 39,919 U   |
| 91   | 0604645A       | Armored Systems Modernization (ASM)-Eng. Dev.               | ស   | 32,425                                  | 6,585                                   |                      | Þ          |
| 92   | 0604649A       | Engineer Mobility Equipment Development                     | ហ   | 19,114                                  | 46,705                                  | 56,196               | 0 63,069 п |
| 93   | 0604710A       | Night Vision Systems - Eng Dev                              | ហ   | 37,658                                  | 34,870                                  | 33,456               | 21,255 U   |
| 94   | 0604713A       | Combat Feeding, Clothing, and Equipment                     | ហ   | 16,049                                  | 76,428                                  | 55,964               | 43,539 U   |
|      |                |                                                             |     |                                         |                                         |                      |            |

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Department of the Army FY 1998/1999 R D T & E Program

Exhibit R-1

| Appro | priation:                    | Appropriation: 2040 A Research Development Test & Eval Army                 |        |         |         | Date: FEB    | 1997      |
|-------|------------------------------|-----------------------------------------------------------------------------|--------|---------|---------|--------------|-----------|
|       |                              |                                                                             |        |         | <br>    | Thousands of | Dollars   |
| Line  | Program<br>Element<br>Number | Item                                                                        | Act    | FY 1996 | FY 1997 | FY 1998      | FY 1999 C |
| 95    | 0604715A                     | Non-System Training Devices - Eng Dev                                       | S      | 50,140  | 48,788  | 76,749       | 73,048 U  |
| 96    | 0604716A                     | Terrain Information - Eng Dev                                               | Ŋ      | 8,509   | 7,144   | 2,942        | 2,686 U   |
| 97    | 0604726A                     | Integrated Meteorological Support System                                    | S      |         |         | 1,946        | 1,931 U   |
| 86    | 0604739A                     | Integrated Broadcast Service                                                | ស      |         | 4,765   | 4,499        | 4,447 U   |
| 66    | 0604740A                     | Tactical Surveillance System - Eng Dev                                      | ស      | 2,954   |         |              | D         |
| 100   | 0604741A                     | Air Defense Command, Control and Intelligence -                             | Ŋ      | 21,810  | 20,031  | 18,350       | 0,698 U   |
| 101   | 0604746A                     | Eng Dev<br>Automatic Test Equipment Development                             | ro     | 10,648  | 9,575   | 2,582        | 2,533 U   |
| 102   | 0604760A                     | Distributive Interactive Simulations (DIS) -                                | ហ      |         | 15,631  | 20,895       | 9,242 U   |
| 103   | 0604766A                     | Engineering Development<br>Tactical Exploitation of National Capabilities - | 2      | 23,266  | 15,235  | 19,113       | 19,531 U  |
| 104   | 0604768A                     | EMD (TIARA) Brilliant Anti-Armor Submunition (BAT)                          | Ŋ      | 190,472 | 161,816 | 202,302      | 129,466 U |
| 105   | 0604770A                     | Joint Surveillance/Target Attack Radar System                               | Ŋ      | 15,302  | 9,624   | 6,940        | 5,670 U   |
| 106   | 0604778A                     | Positioning Systems Development (SPACE)                                     | Ŋ      | 436     | 428     | 419          | 409 U     |
| 107   | 0604780A                     | Combined Arms Tactical Trainer (CATT)                                       | Ŋ      | 56,282  | 26,110  | 2,823        | 2,866 U   |
| 108   | 0604801A                     | Aviation - Eng Dev                                                          | ιΩ     | 4,885   | 5,403   | 5,109        | D 190'9   |
| 109   | 0604802A                     | Weapons and Munitions - Eng Dev                                             | Ŋ      | 14,845  | 23,661  | 3,577        | 24,865 U  |
| 110   | 0604804A                     | Logistics and Engineer Equipment - Eng Dev                                  | ഹ      | 19,132  | 19,903  | 28,039       | 26,932 U  |
| 111   | 0604805A                     | Command, Control, Communications Systems - Eng De                           | o<br>C | 16,740  | 9,556   | 11,052       | 16,395 U  |
| 112   | 0604807A                     | Medical Materiel/Medical Biological Defense                                 | ın     | 4,644   | 4,693   | 4,483        | 5,408 U   |
| 113   | 0604808A                     | Equipment - Eng Dev<br>Landmine Warfare/Barrier - Eng Dev                   | S      | 6,802   | 7,556   | 22,605       | 44,133 U  |
| 114   | 0604814A                     | Sense and Destroy Armament Missile - Eng Dev                                | Ŋ      | 15,764  | 9,934   | 22,372       | 20,813 U  |
|       |                              |                                                                             |        |         |         |              |           |

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Department of the Army FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation: 2040 A        | 2040 A Research Development Test & Eval Army    |     |           |                                       | Date: FEB 1997       | 1997      |
|------|------------------------------|-------------------------------------------------|-----|-----------|---------------------------------------|----------------------|-----------|
| 1 1  | *                            |                                                 |     |           | ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; | Thousands of Dollars |           |
| Line | Flogram<br>Element<br>Number | Item                                            | Act | FY 1996   | FX 1997                               | FY 1998              | FY 1999 C |
| 115  | 0604816A                     | LONGBOW - Eng Dev                               | 2   | 21,969    | 10,644                                |                      | Þ         |
| 116  | 0604817A                     | Combat Identification                           | Ŋ   | 23,669    | 16,411                                | 19,784               | 13,379 U  |
| 117  | 0604818A                     | Army Tactical Command & Control Hardware &      | ហ   | 27,231    | 15,780                                | 20,022               | 18,697 U  |
| 118  | 0604820A                     | Soltware<br>Radar Development                   | Ŋ   | 200       |                                       |                      | Þ         |
| 119  | 0604823A                     | Firefinder                                      | Ŋ   |           | 2,496                                 | 2,564                | 12,022 U  |
| 120  | 0604854A                     | Artillery Systems - EMD                         | ហ   |           | 2,937                                 |                      | n 168     |
|      | Engineeri                    | Engineering and Manufacturing Development       |     | 1,124,738 | 1,141,159                             | 1,107,393            | 1,162,925 |
| 121  | 0604256A                     | Threat Simulator Development                    | 9   | 13,705    | 11,383                                | 14,004               | 11,877 U  |
| 122  | 0604258A                     | Target Systems Development                      | 9   | 13,557    | 9,916                                 | 11,688               | 13,063 U  |
| 123  | 0604759A                     | Major T&E Investment                            | ø   | 62,154    | 40,833                                | 40,449               | 33,407 U  |
| 124  | 0605103A                     | Rand Arroyo Center                              | ø   | 17,895    | 21,108                                | 17,576               | 18,040 U  |
| 125  | 0605301A                     | Army Kwajalein Atoll                            | 9   | 140,930   | 143,789                               | 138,769              | 142,125 U |
| 126  | 0605502A                     | Small Business Innovative Research              | ø   | 85,919    |                                       |                      | Þ         |
| 127  | 0605601A                     | Army Test Ranges and Facilities                 | v   | 142,694   | 130,222                               | 122,117              | 128,919 U |
| 128  | 0605602A                     | Army Technical Test Instrumentation and Targets | 9   | 25,422    | 21,944                                | 33,184               | 32,976 U  |
| 129  | 0605604A                     | Survivability/Lethality Analysis                | 9   | 32,250    | 30,675                                | 32,330               | 30,678 U  |
| 130  | 0605605A                     | DOD High Energy Laser Test Facility             | 9   | 33,231    | 29,974                                | 14,952               | 14,976 U  |
| 131  | 0605606A                     | Aircraft Certification                          | 9   | 2,821     | 2,840                                 | 2,919                | 2,924 U   |
| 132  | 0605702A                     | Meteorological Support to RDT&E Activities      | 9   | 6,458     | 6,348                                 | 6,434                | 6,658 U   |
|      |                              |                                                 |     |           |                                       |                      |           |

Page A-7

Exhibit R-1

Department of the Army FY 1998/1999 R D T & E Program

| Appr | Appropriation: 3             | 2040 A Research Development Test & Eval Army      |     |           |           | Date: FEB            | 1997      |
|------|------------------------------|---------------------------------------------------|-----|-----------|-----------|----------------------|-----------|
| 1    |                              |                                                   |     |           | !         | Thousands of Dollars |           |
| Line | Program<br>Element<br>Number | Item                                              | Act | FY 1996   | FY 1997   | FY 1998              | FY 1999 C |
| 133  | 0605706A                     | Materiel Systems Analysis                         | 9   | 17,241    | 14,126    | 29,707               | 28,675 U  |
| 134  | 0605709A                     | Exploitation of Foreign Items                     | 9   | 8,413     | 7,193     | 7,762                | 4,349 U   |
| 135  | 0605712A                     | Support of Operational Testing                    | 9   | 41,078    | 49,614    | 81,672               | 68,949 U  |
| 136  | 0605801A                     | Programwide Activities                            | 9   | 64,859    | 59,708    | 86,208               | 85,604 U  |
| 137  | 0605802A                     | International Cooperative Research and Developmen | 9   | 1,555     | 1,534     | 1,581                | 1,581 U   |
| 138  | 0605803A                     | Technical Information Activities                  | 9   | 13,549    | 16,552    | 15,451               | 15,872 U  |
| 139  | 0605805A                     | Munitions Standardization, Effectiveness and      | 9   | 16,692    | 3,211     | 6,317                | 5,895 U   |
| 140  | 0605853A                     | Sarety<br>Environmental Conservation              | 9   | 2,493     | 1,723     | 1,778                | 2,977 U   |
| 141  | . 0605854A                   | Pollution Prevention                              | 9   | 11,004    | 13,602    | 5,353                | 4,681 U   |
| 142  | 0605856A                     | Environmental Compliance                          | 9   | 65,985    | 54,251    | 51,378               | 47,604 U  |
| 143  | 0605876A                     | Minor Construction (RPM) - RDT&E                  | 9   | 6,035     | 4,229     | 4,393                | 4,537 U   |
| 144  | 0605878A                     | Maintenance and Repair (RPM) - RDISE              | 9   | 86,907    | 68,580    | 85,119               | 74,681 U  |
| 145  | 0605879A                     | Real Property Services (RPS) - RDI&E              | φ   |           | 90,457    | 88,945               | 88,936 U  |
| 146  | 0605896A                     | Base Operations - RDIKE                           | ø   | 306,481   | 219,946   | 231,653              | 233,633 U |
| 147  | 0605898A                     | Management Headquarters (Research and Development | 9   | 15,007    | 18,407    | 4,837                | 4,765 U   |
| 148  | A6666060                     | Financing for Cancelled Account Adjustments       | 9   | 322       |           |                      | D         |
|      | RDT&E Man                    | RDT&E Management Support                          |     | 1,234,657 | 1,072,165 | 1,136,576            | 1,108,382 |
| 149  | 0603778A                     | MLRS Product Improvement Program                  | 7   | 68,851    | 62,804    | 26,678               | 21,845 U  |
| 150  | 0102419A                     | Aerostat Joint Project Office                     | 7   | 4,000     | 26,376    | 86,193               | 134,298 U |
|      |                              |                                                   |     |           |           |                      |           |

Page A-8

# Department of the Army FY 1998/1999 R D T & E Program

|            |                | Department of FY 1998/1999 R D                           |       | the Army<br>T & E Program |           | Exhib               | Exhibit R-1 |
|------------|----------------|----------------------------------------------------------|-------|---------------------------|-----------|---------------------|-------------|
| Appr       | Appropriation: | 2040 A Research Development Test & Eval Army             |       |                           |           | Date: FEB           | B 1997      |
|            | _              |                                                          |       |                           |           | Thousands of Dollar | f Dollars   |
| Line<br>No |                | Item                                                     | Act   | FY 1996                   | FY 1997   | FY 1998             | FY 1999 C   |
| 151        | 0203726A       | Adv Field Artillery Tactical Data System                 | 7     | 36,973                    | 38,512    | 39,039              | 34,939 U    |
| 152        | 0203735A       | Combat Vehicle Improvement Programs                      | 7     | 206,625                   | 206,816   | 136,520             | 69,443 U    |
| 153        | 0203740A       | Maneuver Control System                                  | 7     | 48,302                    | 27,888    | 25,641              | 23,932 U    |
| 154        | 0203744A       | Aircraft Modifications/Product Improvement               | 7     | 4,288                     | 22,386    | 2,609               | 28,791 U    |
| 155        | 0203752A       | firstaft Engine Component Improvement Program            | 7     | 3,703                     | 3,834     | 2,940               | 2,933 U     |
| 156        | 0203758A       | Digitization                                             | 7     | 110,583                   | 137,078   | 156,960             | 149,015 U   |
| 157        | 0203801A       | Missile/Air Defense Product Improvement Program          | 7     | 59,199                    | 64,557    | 17,412              | 11,431 U    |
| 158        | 0203802A       | Other Missile Product Improvement Programs               | 7     | .64,920                   | 9,874     | 1,255               | 17,011 U    |
| 159        | 0203806A       | TRACTOR RUT                                              | 7     | 3,346                     | 3,112     | 2,111               | D           |
| 160        | 0203808A       | TRACTOR CARD                                             | 7     | 9,521                     | 6,766     | 069′9               | О 669'9     |
| 161        | 0208010A       | Joint Tactical Communications Program (TRI-TAC)          | 7     | 12,647                    | 18,229    | 8,983               | 9,941 U     |
| 162        | 0208053A       | Joint Tactical Ground System                             | 7     |                           | 2,077     | 3,195               | Þ           |
| 163        | 0301359A       | Special Army Program                                     | 7     | 8,538                     | 10,185    | 5,547               | 4,551 U     |
| 164        | 0303140A       | Information Systems Security Program                     | 7     | 3,455                     | 3,161     | 9,647               | 3,826 U     |
| 165        | 0303142A       | SATCOM Ground Environment (SPACE)                        | 7     | 52,821                    | 39,421    | 57,827              | 44,288 U    |
| 166        | 0303150A       | WWMCCS/Global Command and Control System                 | 7     |                           | 19,389    | 15,045              | 14,793 U    |
| 167        | 0305114A       | Traffic Control, Approach and Landing System-FY          | 7     |                           |           | 750                 | D           |
| 168        | 0305128A       | lest and Filt. (n) Security and Investigative Activities | 7     |                           | 477       | 500                 | 955 U       |
| 169        | 0708045A       | End Item Industrial Preparedness Activities              | 7     | 23,699                    | 47,819    | 44,326              | 50,086 U    |
| 170        | 1001018A       | NATO Joint STARS                                         | 7     | 9,500                     |           | 13,500              | 15,105 U    |
|            | Operational    | al Systems Development                                   |       | 730,971                   | 750,761   | 663,368             | 643,876     |
| Total      |                | Research Development Test & Eval Army                    |       | 4,757,412                 | 4,930,628 | 4,510,843           | 4,496,724   |
|            |                | UNCLASSIFIED                                             | IFIED |                           |           | rage A-9            |             |

### Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

| Summary                                     |                                         |               | Date: FEB 1997        | 3 1997                                    |
|---------------------------------------------|-----------------------------------------|---------------|-----------------------|-------------------------------------------|
|                                             |                                         |               | Thousands of Dollars  | f Dollars                                 |
|                                             | FY 1996                                 | FY 1997       | FY 1998               | FY 1999                                   |
| Summary Recap of Budget Activities          |                                         |               |                       |                                           |
| Basic Research                              | 371,516                                 | 352,146       | 382,117               | 399,633                                   |
| Applied Research                            | 537,711                                 | 534,805       | 490,273               | 539,070                                   |
| Advanced Technology Development             | 472,184                                 | 501,133       | 433,305               | 470,528                                   |
| Demonstration and Validation                | 1,712,926                               | 1,930,143     | 2,135,069             | 2,233,510                                 |
| Engineering and Manufacturing Development   | 2,344,798                               | 2,143,869     | 2,085,768             | 2,032,475                                 |
| RDT&E Management Support                    | 684,676                                 | 538,596       | 595,265               | 613,180                                   |
| Operational Systems Development             | 2,347,690                               | 1,855,062     | 1,489,225             | 1,467,918                                 |
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| Total Research Development Test & Eval Navy | 8,471,501                               | 7,855,754     | 7,611,022             | 7,756,314                                 |
| Summary Recap of FYDP Programs              |                                         |               |                       |                                           |
| Strategic Forces                            | 87,453                                  | 70,880        | 75,203                | 90,662                                    |
| General Purpose Forces                      | 1,499,568                               | 1,071,894     | 881,398               | 768,667                                   |
| Intelligence and Communications             | 677,530                                 | 627,411       | 532,624               | 573,241                                   |
| Research and Development (FYDP Program 6)   | 6,122,434                               | 6,000,692     | 6,121,797             | 6,288,396                                 |
| Central Supply and Maintenance              | 83,139                                  | 84,877        |                       | 35,348                                    |
| namitationiana needo noctivicad             |                                         |               |                       |                                           |
| Total Research Development Test & Eval Navy | 8,471,501                               | 7,855,754     | 7,611,022             | 7,756,314                                 |
|                                             |                                         |               |                       |                                           |

Exhibit R-1

Department of the Navy FY 1998/1999 R D T & E Program

| Appr        | Appropriation:                                 | 1319 N Research Development Test & Eval Navy              |     |               |                                       | Dace: FED 1991                        | 1 T 2 2 /                  |
|-------------|------------------------------------------------|-----------------------------------------------------------|-----|---------------|---------------------------------------|---------------------------------------|----------------------------|
| [<br>[<br>[ | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |                                                           |     |               |                                       | Thousands of Dollars                  | Dollars                    |
|             | Program<br>vlement                             |                                                           | 1   | <br>          |                                       |                                       | a 4                        |
| No          |                                                | Item                                                      | Act | FY 1996       | FY 1997                               | FY 1998                               | 0                          |
|             |                                                |                                                           | !   | 1 1 1 1 1 1 1 | t<br>t<br>1<br>1<br>1                 | !<br>!<br>!<br>!                      | 1                          |
| Н           | 0601152N                                       | In-House Independent Laboratory Research                  | 1   | 15,004        | 14,683                                | 15,834                                | 16,236 U                   |
| 7           | 0601153N                                       | Defense Research Sciences                                 | н   | 356,512       | 337,463                               | 366,283                               | 383,397 U                  |
|             |                                                |                                                           |     |               | t t t t t t t t t t t t t t t t t t t | E E E E E E E E E E E E E E E E E E E | 8<br>8<br>8<br>8<br>8<br>8 |
|             | Basic Research                                 | earch                                                     |     | 371,516       | 352,146                               | 382,117                               | 399,633                    |
| n           | 0602111N                                       | Surface/Aerospace Surveillance and Weapons                | 7   | 46,015        | 31,921                                | 32,273                                | 38,833 U                   |
| 4           | 0602121N                                       | Technology<br>Surface Ship Technology                     | 2   | 61,717        | 51,399                                | 46,859                                | 47,353 U                   |
| Ŋ           | 0602122N                                       | Aircraft Technology                                       | 7   | 28,672        | 23,750                                | 23,590                                | 22,860 U                   |
| 9           | 0602131M                                       | Marine Corps Landing Force Technology                     | 2   | 16,871        | 16,374                                | 13,043                                | 14,535 U                   |
| 7           | 0602232N                                       | Command, Control, and Communications Technology           | 7   | 56,534        | 54,735                                | 65,566                                | 71,426 U                   |
| 80          | 0602233N                                       | Readiness, Training, and Environmental Quality            | 7   | 47,773        | 47,561                                | 31,762                                | 33,120 U                   |
| 0           | 0602234N                                       | Technology Materials, Electronics and Computer Technology | 7   | 78,105        | 84,724                                | 76,653                                | 87,445 U                   |
| 10          | 0602270N                                       | Electronic Warfare Technology                             | 71  | 17,133        | 21,535                                | 22,810                                | 24,707 U                   |
| 11          | 0602314N                                       | Undersea Surveillance Weapon Technology                   | 7   | 52,057        | 47,967                                | 51,033                                | 57,875 U                   |
| 12          | 0602315N                                       | Mine Countermeasures, Mining and Special Warfare          | 73  | 43,553        | 44,602                                | 42,737                                | 44,575 U                   |
| 13          | 0602435N                                       | Oceanographic and Atmospheric Technology                  | 73  | 57,260        | 73,416                                | 48,211                                | 58,037 U                   |
| 14          | 0602633N                                       | Undersea Warfare Weaponry Technology                      | 7   | 32,021        | 36,821                                | 35,736                                | 38,304 U                   |
|             | Applied Research                               | esearch                                                   |     | 537,711       | 534,805                               | 490,273                               | 539,070                    |
| 15          | 0603217N                                       | Air Systems and Weapons Advanced Technology               | т   | 64,938        | 36,749                                | 35,093                                | 37,541 U                   |
| 16          | 0603238N                                       | Precision Strike and Air Defense                          | m   | 57,471        | 57,903                                | 43,320                                | 48,094 U                   |
| 17          | 0603270N                                       | Advanced Electronic Warfare Technology                    | ю   | 14,005        | 14,469                                | 18,144                                | 18,738 U                   |
|             |                                                |                                                           |     |               |                                       |                                       |                            |

### Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation: | 1319 N Research Development Test & Eval Navy        |     |         |          | Date: FEB 1997       | 1997      |
|------|----------------|-----------------------------------------------------|-----|---------|----------|----------------------|-----------|
|      | Program        |                                                     |     |         |          | Thousands of Dollars |           |
| Line |                | Item                                                | Act | FY 1996 | FY 1997  | FY 1998              | FY 1999 C |
| 18   | 0603508N       | Ship Propulsion System                              | т   | 17,734  | 32,185   | 39,737               | 46,297 U  |
| 19   | 0603640M       | Marine Corps Advanced Technology Demonstration      | m   | 26,148  | 61,127   | 34,178               | 39,617 U  |
| 20   | 0603706N       | (AID)<br>Medical Development                        | m   | 60,185  | 58,928   | 18,332               | 17,043 U  |
| 21   | 0603707N       | Manpower, Personnel and Training Adv Tech Dev       | m   | 15,772  | 18,490   | 18,812               | 21,641 U  |
| 22   | 0603712N       | Environmental Quality and Logistics Advanced        | ю   | 21,971  | 39,294   | 18,249               | 20,072 U  |
| 23   | 0603747N       | recommendsy<br>Undersea Warfare Advanced Technology | ю   | 46,430  | 44,099   | 54,785               | 61,844 U  |
| 24   | 0603782N       | Shallow Water MCM Demos                             | ю   | 47,786  | 40,807   | 41,602               | 44,492 U  |
| 25   | 0603792N       | Advanced Technology Transition                      | ю   | 76,503  | . 69,052 | 87,285               | 97,269 п  |
| 26   | 0603794N       | C3 Advanced Technology                              | м   | 23,241  | 28,030   | 23,768               | 17,880 U  |
|      | Advanced       | Advanced Technology Development                     |     | 472,184 | 501,133  | 433,305              | 470,528   |
| 27   | 0603207N       | Air/Ocean Tactical Applications                     | 4   | 19,004  | 17,740   | 16,017               | 20,350 U  |
| 28   | 0603208N       | Training System Aircraft                            | 4   | 2,927   | 2,292    |                      | Þ         |
| 29   | 0603216N       | Aviation Survivability                              | 4   | 15,636  | 14,865   | 7,859                | 10,323 U  |
| 30   | 0603254N       | ASW Systems Development                             | 4   | 28,860  | 20,928   | 22,869               | 24,879 U  |
| 31   | 0603261N       | Tactical Airborne Reconnaissance                    | 4   | 21,669  | 23,082   | 10,607               | 1,458 U   |
| 32   | 0603382N       | Advanced Combat Systems Technology                  | 4   | 2,657   | 3,700    | 5,232                | 8,823 U   |
| 33   | 0603451N       | Tactical Space Operations                           | 4   | 911     |          |                      | Þ         |
| 34   | 0603502N       | Surface and Shallow Water Mine Countermeasures      | 4   | 54,626  | 84,851   | 58,231               | 67,922 U  |
| 35   | 0603504N       | Advanced Submarine Combat Systems Development       | 4   | 26,826  | 37,291   | 61,122               | 70,321 U  |
|      |                |                                                     |     |         |          |                      |           |

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# Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

Þ Þ FY 1999 C 5,739 7,768 11,315 3,677 65,385 52,089 30,961 119,934 124,734 111,273 119,960 4,717 22,254 45,075 Thousands of Dollars Date: FEB 1997 9,776 7,050 3,030 16,198 137,442 FY. 1998 5,704 59,067 38,682 4,931 125,357 98,587 19,194 118,728 49,741 2,769 9,974 3,781 63,684 4,342 17,982 13,242 12,377 126,563 FY 1997 5,491 12,210 8,188 90,066 66,055 11,167 9,657 3,084 8,052 54,946 10,034 80,993 FY 1996 9,060 12,286 16,636 75,242 9,448 6,012 53,378 .38,412 109,593 Act Ship Preliminary Design & Feasibility Studies Appropriation: 1319 N Research Development Test & Eval Navy Non-Acoustic Anti-Submarine Warfare (ASW) Shipboard System Component Development Advanced Submarine System Development Advanced Surface Machinery Systems Submarine Tactical Warfare Systems Advanced Nuclear Power Systems Ship Concept Advanced Design Surface Ship Torpedo Defense Carrier Systems Development Ship Combat Survivability Radiological Control RETRACT JUNIPER Surface ASW PILOT FISH 0603506N 0603512N 0603513N 0603514N 0603528N 0603536N 0603542N 0603553N 0603561N 0603562N 0603563N 0603564N 0603570N 0603573N 0603525N Program Element Number Line 38 39 40 41 42 46 47 48 49 20 37 43 44 45 36

Page N-3

106,245 U

60,134

34,039

Advanced Warhead Development (MK-50)

Combat System Integration

CHALK EAGLE

0603576N 0603582N N6036090 0603610N

51 52 53 54

Conventional Munitions

Marine Corps Assault Vehicles

0603611M

2,820

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1,270 61,318

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34,190

28,278

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6,078 34,150 2,893

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### Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

Date: FEB 1997 Appropriation: 1319 N Research Development Test & Eval Navy

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|------------|---------------|--------------------------------------------------|-------------|-----------------------------------------|-----------------------------------------|--------------|------------|
|            | Program       |                                                  | 1           |                                         |                                         | Thousands of | of Dollars |
| Line<br>No |               | Item                                             | Act         | FY 1996                                 | FY 1997                                 | FY 1998      | FY 1999 C  |
| 56         | 0603612M      | Marine Corps Mine/Countermeasures Systems - Adv  | 4           | 1,652                                   | 529                                     |              | 1,985 U    |
| 57         | 0603635M      | Dev<br>Marine Corps Ground Combat/Support System | 4           | 52,595                                  | 42,348                                  | 36,464       | 35,850 U   |
| 28         | 0603654N      | Joint Service Explosive Ordnance Development     | 4           | 8,278                                   | 5,844                                   | 10,701       | 11,758 U   |
| 59         | 0603658N      | Cooperative Engagement                           | 4           |                                         |                                         | 139,229      | 87,556 U   |
| 09         | 0603711N      | Fleet Tactical Development                       | 4           | 4,024                                   | 3,261                                   |              | D          |
| 19         | . 0603713N    | Ocean Engineering Technology Development         | 4           | 5,074                                   | 8,256                                   | 12,658       | n 965'6    |
| 62         | 0603721N      | Environmental Protection                         | 4           | 58,635                                  | 46,424                                  | 52,401       | 58,181 U   |
| 63         | 0603724N      | Navy Energy Program                              | 4           | 1,914                                   | 2,955                                   | 4,159        | 4,629 U    |
| 64         | 0603725N      | Facilities Improvement                           | 4           | 1,746                                   | 2,149                                   | 1,720        | 2,020 U    |
| 65         | 0603734N      | CHALK CORAL                                      | 4           | 68,782                                  | 74,448                                  | 94,358       | 100,154 U  |
| 99         | 0603746N      | RETRACT MAPLE                                    | 4           | 82,645                                  | 80,369                                  | 120,033      | 153,238 U  |
| 29         | 0603748N      | LINK PLUMERIA                                    | 4           | 20,695                                  | 34,463                                  | 29,433       | 16,760 U   |
| 68         | 0603751N      | RETRACT ELM                                      | 4           | 31,545                                  | 23,972                                  | 21,822       | 11,950 U   |
| 69         | 0603755N      | Ship Self Defense - Dem/Val                      | 4           | 309,901                                 | 280,381                                 | 9,961        | 12,501 U   |
| 70         | 0603785N      | Combat Systems Oceanographic Performance         | 4           | 15,219                                  | 13,079                                  | 11,706       | 17,668 U   |
| 71         | . 0603787N    | Assessment<br>Special Processes                  | 4           | 69,793                                  | 88,536                                  | 81,439       | 83,675 U   |
| 72         | N0603790N     | NATO Research and Development                    | 4           |                                         | 9,528                                   | 13,330       | 11,267 U   |
| 73         | NS678090      | Land Attack Technology                           | 4           | 32,205                                  | 50,067                                  | 37,809       | 52,985 U   |
| 74         | N008800N      | Joint Strike Fighter (JSF) - Dem/Val             | 4           | 79,981                                  | 246,076                                 | 448,855      | 443,522 U  |
| 75         | 0603851M      | Nonlethal Weapons - Dem/Val                      | 4           | 4,590                                   | 9,591                                   | 16,807       | 23,515 U   |
|            |               |                                                  |             |                                         |                                         |              |            |

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Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

| Date: FEB 1997                  |                                   |  |
|---------------------------------|-----------------------------------|--|
|                                 |                                   |  |
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| annual of 1210 M Deceased Dette | APPLOPITATION: 1917 M MOSCATON DA |  |

| Appro | Appropriation: | 1319 N Research Development Test & Eval Navy      |                                         |                                                     |           | Date: FEB 1997       | 3 1997    |
|-------|----------------|---------------------------------------------------|-----------------------------------------|-----------------------------------------------------|-----------|----------------------|-----------|
| 1 1 1 |                | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1           | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                                                     |           | Thousands of Dollars | f Dollars |
| -     |                |                                                   | 1<br>1                                  | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |           |                      | 9 e       |
| No    | Number         | Item                                              | Act                                     | FY 1996                                             | FY 1997   | FY 1998              | FY 1999 C |
| 16    | 0603852N       | Arensal Ship                                      | 4                                       |                                                     | 23,977    |                      | D         |
| 77    | 0603860N       | Joint Precision Approach and Landing System - Dem | n 4                                     |                                                     |           | 2,993                | b         |
| 78    | 0604327N       | val<br>Hardened Target Munitions                  | 4                                       |                                                     |           | 4,987                | Þ         |
| 79    | 0604707N       | Space and Electronic Warfare (SEW) Architecture/  | 4                                       | 5,376                                               | 4,960     | 4,705                | 0 /29'9   |
|       |                | Engineering Support                               |                                         | 200 017                                             | 1 020 143 | 135.069              | 2,233,510 |
|       | Demonstra      | Demonstration and validation                      |                                         | 22112111                                            | 100001    |                      |           |
| 80    | 0603208N       | Training System Aircraft                          | Ŋ                                       | -604                                                |           | 403                  | 613 U     |
| 81    | 0603266N       | AH-1T Composite Rotor Blade (H)                   | S                                       | 10,995                                              | 986'69    |                      | Ω         |
| 82    | 0604212N       | Other Helo Development                            | ιn                                      | 76,289                                              | 62,674    | 73,354               | 219,570 U |
| 83    | 0604214N       | AV-8B Aircraft - Eng Dev                          | Ŋ                                       | 25,479                                              | 16,089    | 11,034               | 11,230 U  |
| 84    | 0604215N       | Standards Development                             | Ŋ                                       | 12,936                                              | 25,367    | 36,297               | 45,295 U  |
| 85    | 0604217N       | S-3 Weapon System Improvement                     | ιΩ                                      | 12,013                                              | 9,553     | 4,735                | 24,049 U  |
| 86    | 0604218N       | Air/Ocean Equipment Engineering                   | ro                                      | 5,868                                               | 5,376     | 6,129                | 7,759 U   |
| 87    | 0604221N       | P-3 Modernization Program                         | S                                       | 16,045                                              | 7,703     | 3,191                | з,023 п   |
| 88    | 0604231N       | Tactical Command System                           | Ŋ                                       | 24,194                                              | 28,654    | 31,518               | 53,116 U  |
| 89    | 0604245N       | H-1 Upgrades                                      | Ŋ                                       |                                                     |           | 80,735               | 90,264 U  |
| 90    | 0604261N       | Acoustic Search Sensors                           | ıs                                      | 9,219                                               | 13,981    | 16,947               | 30,147 U  |
| 91    | 0604262N       | V-22A                                             | 22                                      | 717,336                                             | 552,082   | 529,495              | 272,716 U |
| 92    | 0604264N       | Air Crew Systems Development                      | Z.                                      | 16,725                                              | 26,083    | 12,111               | 14,126 U  |
| 93    | 0604270N       | EW Development                                    | Ŋ                                       | 87,436                                              | 121,431   | 101,803              | 127,853 U |
|       |                |                                                   |                                         | •                                                   |           |                      |           |

Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

Þ 1,662 U 1,329 U 17,730 U 115,643 139,499 FY 1999 19,937 Thousands of Dollars Date: FEB 1997 9,644 549 16,503 FY 1998 87,934 471 102,994 FY 1997 9,240 88,367 4,098 31,141 21,404 30,462 FY 1996 87,999 Act Ŋ S 2 Ŋ S S Surface Combatant Combat System Engineering Appropriation: 1319 N Research Development Test & Eval Navy Tri-Service Standoff Attack Missile LPD-17 Class Systems Integration Standard Missile Improvements Arsenal Ship Airborne MCM Item 0604307N 0604310N 0604373N 0604311N 0604312N 0604366N Program Element Number Line 94 95 96 97 98

b Þ 10,494 U 7,088 U 9,781 U 18,584 U 210,363 U Þ 125,904 U 5,026 3,650 3,224 47,914 32,376 6,417 27,731 5,167 42,294 3,462 9,225 6,081 311,076 2,815 28,890 9,298 11,325 23,701 49,542 45,663 75,713 4,794 6,285 9,848 10,294 2,381 58,638 21,740 17,828 3,883 372,217 87,524 21,837 6,804 28,961 30,991 7,438 4,712 14,076 10,938 324,302 35,457 2,946 66,191 40,906 20,881 15,154 79,411 50,826 S Ŋ Ŋ ເດ S Ŋ S Ŋ 2 ທ Unguided Conventional Air-Launched Weapons Combat Information Center Conversion Ship Contract Design/ Live Fire T&E SSN-688 and Trident Modernization Enhanced Modular Signal Processor Submarine Tactical Warfare System Navy Tactical Computer Resources Shipboard Aviation Systems Submarine Combat System SSN-21 Developments Ship Survivability Mine Development New Design SSN Air Control 0604504N 0604503N 0604507N 0604512N 0604518N 0604524N 0604603N 0604516N 0604558N 0604561N 0604567N 0604574N 0604601N 0604562N 105 106 108 109 110 100 101 102 103 104 107 111 112 113

UNCLASSIFIED

# Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation:                                                                              | 1319 N Research Development Test & Eval Navy             | :   |                                         |                     | Date: FEB 1997                          | 3 1997    |
|------|---------------------------------------------------------------------------------------------|----------------------------------------------------------|-----|-----------------------------------------|---------------------|-----------------------------------------|-----------|
| !    | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |                                                          |     |                                         |                     | Thousands of Dollars                    |           |
|      |                                                                                             |                                                          | ;   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | S O       |
| No   | Number                                                                                      | Item                                                     | Act | FY 1996                                 | FY 1997             | FY 1998                                 | FY 1999 C |
|      |                                                                                             |                                                          |     |                                         |                     |                                         |           |
| 114  | 0604610N                                                                                    | Lightweight Torpedo Development                          | ហ   | 19,947                                  | 10,832              | 17,290                                  | 8,129 U   |
| 115  | 0604612M                                                                                    | Marine Corps Mine Countermeasures Systems - Eng          | ເດ  | 1,317                                   | 3,588               | 950                                     | 3,907 U   |
| 116  | 0604618N                                                                                    | Dev<br>Joint Direct Attack Munition                      | 2   | 27,873                                  | 33,461              | 12,714                                  | 11,853 U  |
| 117  | 0604654N                                                                                    | Joint Service Explosive Ordnance Development             | 2   | 5,213                                   | 5,609               | 6,613                                   | 6,975 U   |
| 118  | 0604703N                                                                                    | Personnel, Training, Simulation, and Human Factor        | ເດ  | 1,002                                   | 972                 | 1,022                                   | 1,252 U   |
| 119  | 0604710N                                                                                    | Navy Energy Program                                      | 2   | 2,518                                   | 1,903               | 2,088                                   | 2,535 U   |
| 120  | 0604719M                                                                                    | Marine Corps Command/Control/Communications              | 2   | 10,812                                  |                     |                                         | D         |
| 121  | 0604721N                                                                                    | Systems<br>Battle Group Passive Horizon Extension System | ιń  | 7,860                                   | 4,478               | 4,531                                   | 5,975 U   |
| 122  | 0604727N                                                                                    | Joint Standoff Weapon Systems                            | ις  | 79,901                                  | 82,488              | 71,526                                  | 78,828 U  |
| 123  | 0604755N                                                                                    | Ship Self Defense - EMD                                  | Ŋ   | 194,715                                 | 144,144             | 132,270                                 | 102,790 U |
| 124  | 0604771N                                                                                    | Medical Development                                      | Ŋ   | 3,258                                   | 3,021               | 3,620                                   | 4,397 U   |
| 125  | 0604777N                                                                                    | Navigation/ID System                                     | Ŋ   | 52,684                                  | 46,837              | 50,370                                  | 57,931 U  |
| 126  | 0604784N                                                                                    | Distributed Surveillance System                          | 22  | 97,163                                  | 55,480              | 33,048                                  | 38,623 U  |
|      | Engineeri                                                                                   | Engineering and Manufacturing Development                |     | 2,344,798                               | 2,143,869           | 2,085,768                               | 2,032,475 |
| 127  | 0604256N                                                                                    | Threat Simulator Development                             | 9   | 28,234                                  | 22,574              | 12,860                                  | 15,010 U  |
| 128  | 0604258N                                                                                    | Target Systems Development                               | 9   | 23,202                                  | 29,686              | 48,308                                  | 54,766 U  |
| 129  | 0604759N                                                                                    | Major T&E Investment                                     | v   | 48,872                                  | 38,950              | 33,236                                  | 18,000 U  |
| 130  | 0605152N                                                                                    | Studies and Analysis Support - Navy                      | 9   | 7,558                                   | 6,679               | 8,755                                   | 9,264 U   |
| 131  | 0605154N                                                                                    | Center for Naval Analyses                                | 9   | 42,903                                  | 38,608              | 43,476                                  | 44,794 U  |
|      |                                                                                             |                                                          |     |                                         |                     |                                         |           |

### Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1 Date: FEB 1997

Appropriation: 1319 N Research Development Test & Eval Navy

|     | Program   |                                                 | 1   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |         | Thousands of Dollars | Dollars   |
|-----|-----------|-------------------------------------------------|-----|-----------------------------------------|---------|----------------------|-----------|
| No  |           | Item                                            | Act | FY 1996                                 | FY 1997 | FY 1998              | FY 1999 C |
| 132 | 0605155N  | Fleet Tactical Development                      | 9   | 2,464                                   | 2,861   | 2,747                | 3,654 U   |
| 133 | 0605502N  | Small Business Innovative Research              | 9   | 111,340                                 |         |                      | D         |
| 134 | 0605804N  | Technical Information Services                  | 9   | 2,293                                   | 4,533   | 8,763                | B,950 U   |
| 135 | 0605853N  | Management, Technical & International Support   | 9   | 17,500                                  | 19,672  | 24,305               | 26,911 U  |
| 136 | 0605856N  | Strategic Technical Support                     | 9   | 2,890                                   | 1,907   | 2,110                | 2,238 U   |
| 137 | 0605861N  | RDT&E Science and Technology Management         | 9   | 60,140                                  | 55,961  | 57,591               | 56,663 U  |
| 138 | 0605862N  | RDT&E Instrumentation Modernization             | 9   | 11,509                                  | 5,946   | 8,546                | 8,544 U   |
| 139 | 0605863N  | RDT&E Ship and Aircraft Support                 | 9   | 59,706                                  | 48,253  | 48,596               | 55,613 U  |
| 140 | 0605864N  | Test and Evaluation Support                     | 9   | 235,938                                 | 233,908 | 263,934              | 272,624 U |
| 141 | 0605865N  | Operational Test and Evaluation Capability      | ø   | 5,974                                   | 7,358   | 9,107                | 9,154 U   |
| 142 | 0605866N  | Navy Space and Electronic Warfare (SEW) Support | 9   | 2,970                                   | 2,753   | 2,783                | 4,170 U   |
| 143 | 0605867N  | SEW Surveillance/Reconaissance Support          | 9   | 11,675                                  | 11,488  | 11,941               | 13,941 U  |
| 144 | 0605871M  | Marine Corps Tactical Exploitation of National  | 9   | 2,753                                   |         |                      | b         |
| 145 | 0605873M  | Caparities Marine Corps Program Wide Support    | 9   | 5,378                                   | 7,459   | 8,207                | 8,884 U   |
| 146 | N6666060  | Financing for Cancelled Account Adjustments     | 9   | 1,377                                   |         |                      | Þ         |
|     | RDT&E Man | RDT&E Management Support                        |     | 684,676                                 | 538,596 | 595,265              | 613,180   |
| 147 | 0101221N  | Strategic Sub & Weapons System Support          | 7   | 34,666                                  | 40,082  | 44,419               | 52,124 U  |
| 148 | 0101224N  | SSBN Security Technology Program                | 7   | 28,572                                  | 23,250  | 24,726               | 30,190 U  |
| 149 | 0101226N  | Submarine Acoustic Warfare Development          | 7   | 7,479                                   | 7,548   | 6,058                | 8,348 U   |
|     |           |                                                 |     |                                         |         |                      |           |

UNCLASSIFIED

Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

| Date: FEB 1997 |                 |
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| l Navy         |                 |
| & Eva          | 1 4 4 4 4       |
| Test           |                 |
| Development    |                 |
| N Research     |                 |
| : 1319         | 1               |
| Appropriation  |                 |

| Appro | opriation:                   | Appropriation: 1319 N Research Development Test & Eval Navy |     |          |                                       | Date: FEB | 1997      |
|-------|------------------------------|-------------------------------------------------------------|-----|----------|---------------------------------------|-----------|-----------|
| 1     |                              |                                                             |     |          | : : : : : : : : : : : : : : : : : : : | sands     | מ         |
| Line  | Program<br>Element<br>Number | Item                                                        | Act | FY 1996  | FY 1997                               | FY 1998   | FY 1999 C |
| 150   | 0101402N                     | Navy Strategic Communications                               | 7   | 16,736   |                                       |           | Д         |
| 151   | 0204136N                     | F/A-18 Squadrons                                            | 7   | 857,265  | 422,715                               | 316,976   | 198,891 U |
| 152   | 0204152N                     | E-2 Squadrons                                               | 7   | 59,620   | 62,012                                | 64,852    | 48,147 U  |
| 153   | 0204163N                     | Fleet Telecommunications (Tactical)                         | 7   | 21,160   | 19,138                                | 19,336    | 23,289 U  |
| 154   | 0204229N                     | Tomahawk and Tomahawk Mission Planning Center               | 7   | 157,745  | 140,365                               | 93,359    | 67,253 U  |
| 155   | 0204311N                     | (TMPC) Integrated Surveillance System                       | 7   | 30,559   | 34,608                                | 9,882     | 24,377 U  |
| 156   | 0204413N                     | Amphibious Tactical Support Units                           | 7   | 4,074    | 1,459                                 | 672       | з,210 п   |
| 157   | 0204571N                     | Consolidated Training Systems Development                   | 7   | . 65,092 | 48,978                                | 58,956    | 47,563 U  |
| 158   | 0204575N                     | Electronic Warfare (EW) Readiness Support                   | 7   |          | 1,583                                 | 1,626     | з,766 п   |
| 159   | 0205601N                     | HARM Improvement                                            | 7   | 3,355    | 36,774                                | 6,169     | 8,436 U   |
| 160   | 0205604N                     | Tactical Data Links                                         | 7   | 42,567   | 35,574                                | 41,375    | 45,441 U  |
| 161   | 0205620N                     | Surface ASW Combat System Integration                       | 7   | 9,522    | 6,503                                 | 7,991     | 7,190 U   |
| 162   | 0205632N                     | MK-48 ADCAP                                                 | 7   | 21,310   | 12,242                                | 10,786    | 19,543 U  |
| 163   | 0205633N                     | Aviation Improvements                                       | 7   | 63,269   | 52,742                                | 60,025    | 69,517 U  |
| 164   | 0205658N                     | Navy Science Assistance Program                             | 7   | 6,663    | 12,533                                |           | Þ         |
| 165   | 0205667N                     | F-14 Upgrade                                                | 7   | 19,816   | 9,437                                 | 11,704    | 14,839 U  |
| 166   | 0205675N                     | Operational Nuclear Power Systems                           | 7   | 56,571   | 53,590                                | 55,998    | 54,909 U  |
| 167   | 0206313M                     | Marine Corps Communications Systems                         | 7   | 6,804    | 52,853                                | 38,296    | 41,174 U  |
| 168   | 0206623M                     | Marine Corps Ground Combat/Supporting Arms System           | 7   | 14,439   | 8,495                                 | 12,568    | 15,470 U  |
| 169   | 0206624M                     | Marine Corps Combat Services Support                        | 7   | 6,131    | 5,681                                 | 5,048     | 4,757 U   |

# Department of the Navy FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr  | opriation: | Appropriation: 1319 N Research Development Test & Eval Navy | 1   |           |           | Date: FEB 1997                                 | 3 1997    |
|-------|------------|-------------------------------------------------------------|-----|-----------|-----------|------------------------------------------------|-----------|
|       | Drogram    |                                                             |     |           |           | Thousands of Dollars                           |           |
| Line  |            |                                                             |     |           | 1         | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | ν ()      |
| No    | Number     | Item                                                        | Act | FY 1996   | FY 1997   | FY 1998                                        | FY 1999 c |
| 170   | 0206625M   | Marine Corps Intelligence/Electronics Warfare               | 7   | 6,185     |           |                                                | Þ         |
| 171   | 0206626M   | Systems Marie Corps Command/Control/Communications          | 7   | 15,012    |           |                                                | Þ         |
| 172   | 0207161N   | Tactical AIM Missiles                                       | 7   | 28,103    | 52,463    | 60,029                                         | 66,040 U  |
| 173   | 0207163N   | Advanced Medium Range Air-to-Air Missile (AMRAAM)           | 7   | 4,306     | 2,149     | 5,700                                          | 4,855 U   |
| 174   | 0301303N   | Maritime Intelligence                                       | 7   |           |           |                                                |           |
| 175   | 0301327N   | Technical Reconnaissance and Surveillance                   | 7   |           |           |                                                |           |
| 176   | 0303109N   | Satellite Communications (SPACE)                            | 7   | 33,851    | 36,360    | 17,026                                         | 27,408 U  |
| 177   | 0303140N   | Information Systems Security Program                        | 7   | 21,383    | 25,525    | 20,291                                         | 25,301 U  |
| 178   | 0303150N   | WWMCCS/Global Command and Control System                    | 7   |           |           | 498                                            | 508 U     |
| 179   | 0304111N   | Special Activities                                          | 7   |           |           |                                                |           |
| 180   | 0305154N   | Defense Airborne Reconnaissance Program                     | 7   |           | 7,939     |                                                | Þ         |
| 181   | 0305160N   | Defense Meteorological Satellite Program (SPACE)            | 7   | 25,271    | 13,134    | 3,165                                          | 9,135 U   |
| 182   | 0305192N   | Joint Military Intelligence Programs                        | 7   |           |           | 2,412                                          | 2,293 U   |
| 183   | 0305207N   | Manned Reconnaissance Systems                               | 7   |           |           | 344                                            | 342 U     |
| 184   | 0305889N   | Counterdrug Intelligence Support                            | 7   | 30,162    |           |                                                | Þ         |
| 185   | 0305927N   | Naval Space Surveillance                                    | 7   | 712       | 677       | 399                                            | 529 U     |
| 186   | 0708011N   | Industrial Preparedness                                     | 7   | 83,139    | 84,877    |                                                | 35,348 U  |
|       | Operation  | Operational Systems Development                             |     | 2,347,690 | 1,855,062 | 1,489,225                                      | 1,467,918 |
| Total |            | Research Development Test & Eval Navy                       |     | 8,471,501 | 7,855,754 | 7,611,022                                      | 7,756,314 |
|       |            |                                                             |     |           |           |                                                |           |

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Department of the Air Force FY 1998/1999 R D T & E Progra

Summary

Exhibit R-1

| Exhibit R-1 | Date: FEB 1997 |
|-------------|----------------|
| E Program   |                |

|                                                     |             |                   | Thousands of Dollars                    | f Dollars  |
|-----------------------------------------------------|-------------|-------------------|-----------------------------------------|------------|
|                                                     | FY 1996     | FY 1997           | FY 1998                                 | FY 1999    |
| Summary Recap of Budget Activities                  |             |                   |                                         |            |
| Basic Research                                      | 216,348     | 210,763           | 226,832                                 | 230,210    |
| Applied research<br>Advanced Technology Development | 517,219     | 473,072           | 402,314                                 | 431,811    |
| Demonstration and Validation                        | 545,720     | 828,397           | 1,149,365                               | 1,223,026  |
| Engineering and Manufacturing Development           | 4,585,123   | 4,520,611         | 4,444,276                               | 3,712,356  |
| RDIAE Management Support                            | 1,046,970   | 1,041,600         | 821,300                                 | 808,925    |
| Operational Systems Development                     | 4,974,379   | 6,340,501         | 6,813,938                               | 6,774,194  |
|                                                     |             | 1 1 1 1 1 1 1 1 1 | * * * * * * * * * * * * * * * * * * * * |            |
| Total Research Development Test & Eval AF           | 12,512,814  | 14,068,836        | 14,451,379                              | 13,799,985 |
| Summary Recap of FYDP Programs                      |             |                   |                                         |            |
| Strategic Forces                                    | .40,340     | 29,307            | 29,794                                  | 20,049     |
| General Purpose Forces                              | 1,120,298   | 1,381,535         | 1,591,818                               | 1,419,603  |
| Intelligence and Communications                     | 3,613,731   | 4,932,826         | 5,200,153                               | 5,114,802  |
| Mobility Forces                                     | 16,826      | 79,923            | 133,295                                 | 218,774    |
| Research and Development (FYDP Program 6)           | 7,622,978   | 7,558,159         | 7,394,019                               | 6,866,357  |
| Central Supply and Maintenance                      | 80,748      | 75,958            | 54,600                                  | 52,210     |
| Training Medical and Other                          | 1,009       | 1,781             | 1,427                                   |            |
| Administration and Assoc Activities                 | 9,020       | 5,793             | 6,497                                   | 6,756      |
| Support of Other Nations                            | 7,864       | 3,554             | 39,776                                  | 101,434    |
|                                                     | 1 1 1 1 1 1 |                   | * * * * * * * * * * * * * * * * * * * * |            |
| Total Research Development Test & Eval AF           | 12,512,814  | 14,068,836        | 14,451,379                              | 13,799,985 |
|                                                     |             |                   |                                         |            |

### Department of the Air Force FY 1998/1999 R D T & E Program

Exhibit R-1

Date: FEB 1997 Appropriation: 3600 F Research Development Test & Eval AF

|      |                   |                                             | 1   |         |         | Thousands of | of Dollars |
|------|-------------------|---------------------------------------------|-----|---------|---------|--------------|------------|
| Line | Element<br>Number | Item                                        | Act | FY 1996 | FY 1997 | FY 1998      | FY 1999 C  |
| H    | 0601102F          | Defense Research Sciences                   | 1   | 216,348 | 210,763 | 226,832      | 230,210 U  |
|      | Basic Research    | earch                                       |     | 216,348 | 210,763 | 226,832      | 230,210    |
| 2    | 0602102F          | Materials                                   | 7   | 71,142  | 77,877  | 70,224       | 74,503 U   |
| e    | 0602201F          | Aerospace Flight Dynamics                   | 2   | 60,363  | 62,934  | 60,509       | 65,039 U   |
| 4    | 0602202F          | Armstrong Lab Exploratory Development       | 7   | 81,171  | 86,382  | 76,102       | 77,002 U   |
| D.   | 0602203F          | Aerospace Propulsion                        | 7   | 71,766  | 72,221  | 69,303       | 68,416 U   |
| 9    | 0602204F          | Aerospace Avionics                          | 7   | 64,747  | 65,360  | 69,401       | 70,469 U   |
| 7    | 0602269F          | Hypersonic Technology Program               | 7   | 12,624  | 7,153   | 9,840        | 12,984 U   |
| ω    | 0602601F          | Phillips Lab Exploratory Development        | 7   | 130,112 | 147,712 | 111,136      | 123,514 U  |
| O    | 0602602F          | Conventional Munitions                      | 7   | 42,886  | 41,038  | 40,772       | 42,999 U   |
| 10   | 0602702F          | Command Control and Communications          | 7   | 92,244  | 93,215  | 86,067       | 84,537 U   |
|      | Applied Research  | esearch                                     |     | 627,055 | 653,892 | 593,354      | 619,463    |
| 11   | 0603106F          | Logistics Systems Technology                | m   | 16,372  | 17,467  | 15,338       | 17,775 U   |
| 12   | 0603108F          | Integrated Data Systems                     | m   | 14,406  | 17,332  | 19,753       | 19,706 U   |
| 13   | 0603112F          | Advanced Materials for Weapon Systems       | т   | 29,817  | 25,136  | 20,596       | 21,429 U   |
| 14   | 0603202F          | Aerospace Propulsion Subsystems Integration | m   | 31,111  | 27,031  | 30,564       | 31,434 U   |
| 15   | 0603203F          | Advanced Avionics for Aerospace Vehicles    | т   | 29,432  | 27,475  | 26,507       | 28,206 U   |
| 16   | 0603205F          | Flight Vehicle Technology                   | m   | 10,034  | 8,052   | 5,766        | 6,442 U    |
| 17   | 0603211F          | Aerospace Structures                        | т   | 12,033  | 9,945   | 15,032       | 17,745 U   |
|      |                   |                                             |     |         |         |              |            |

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# Department of the Air Force FY 1998/1999 R D T & E Program

Exhibit R-1

| Appro | ation:                       | 3600 F Research Development Test & Eval AF       |                            |         |                                         | Date: FEB 1997       | 3 1997    |
|-------|------------------------------|--------------------------------------------------|----------------------------|---------|-----------------------------------------|----------------------|-----------|
| 1     |                              | 1                                                | 3<br>9<br>9<br>1<br>1<br>1 | 1       | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Thousands of Dollars |           |
| Line  | Program<br>Element<br>Number | Item                                             | Act                        | FY 1996 | FY 1997                                 | FY 1998              | FY 1999 C |
| 18    | 0603216F                     | Aerospace Propulsion and Power Technology        | т                          | 39,365  | 36,506                                  | 37,014               | 39,836 U  |
| 19    | 0603227F                     | Personnel, Training and Simulation Technology    | ю                          | 8,509   | 7,420                                   | 6,147                | 7,182 U   |
| 20    | 0603231F                     | Crew Systems and Personnel Protection Technology | ю                          | 21,684  | 21,442                                  | 17,204               | 17,966 U  |
| 21    | 0603238F                     | Global Surveillance and Communication Technology | т                          | 2,367   | 2,191                                   |                      | D         |
| 22    | 0603245F                     | Flight Vehicle Technology Integration            | т                          | 11,379  | 6,132                                   | 7,795                | 9,828 U   |
| 23    | 0603253F                     | Advanced Avionics Integration                    | т                          | 16,636  | 14,809                                  | 12,716               | 14,218 U  |
| 24    | 0603270F                     | Electronic Combat Technology                     | ю                          | 21,301  | 26,414                                  | 25,621               | 26,765 υ  |
| 25    | 0603302F                     | Space and Missile Rocket Propulsion              | ю                          | 18,162  | 22,353                                  | 16,247               | 22,037 U  |
| 26    | 0603311F                     | Ballistic Missile Technology                     | т                          | 8,041   | 2,699                                   |                      | D         |
| 27    | 0603401F                     | Advanced Spacecraft Technology                   | т                          | 72,456  | 73,215                                  | 40,846               | 44,679 U  |
| 28    | 0603410F                     | Space Systems Environmental Interactions         | т                          | 3,187   | 2,793                                   | 3,151                | 3,527 U   |
| 29    | 0603601F                     | rechnology<br>Conventional Weapons Technology    | т                          | 31,719  | 23,754                                  | 26,227               | 23,712 U  |
| 30    | 0603605F                     | Advanced Weapons Technology                      | ю                          | 73,277  | 54,027                                  | 41,238               | 41,660 U  |
| 31    | 0603707F                     | Weather Systems Technology                       | m                          | 4,194   | 3,273                                   | 2,036                | 2,056 U   |
| 32    | 0603723F                     | Environmental Engineering Technology             | က                          | 8,421   | 7,520                                   | 4,084                | 4,857 U   |
| 33    | 0603726F                     | C3I Subsystem Integration                        | м                          | 11,157  | 8,390                                   | 9,922                | 10,566 U  |
| 34    | 0603728F                     | Advanced Computing Technology                    | ю                          | 10,327  | 8,089                                   | 5,613                | 6,684 U   |
| 35    | 0603789F                     | C3 Advanced Development                          | ω.                         | 11,832  | 10,389                                  | 12,897               | 13,501 U  |
| 36    | 0305176F                     | Combat Survivor Evader Locator                   | ю                          |         | 9,218                                   |                      | Þ         |
|       | Advanced                     | Advanced Technology Development                  |                            | 517,219 | 473,072                                 | 402,314              | 431,811   |
|       |                              |                                                  | •                          |         |                                         |                      |           |

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# Department of the Air Force FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr |                              | 3600 F Research Development Test & Eval AF                             |                                 |                                         |         | Date: FEB 1997       |            |
|------|------------------------------|------------------------------------------------------------------------|---------------------------------|-----------------------------------------|---------|----------------------|------------|
| 1    |                              | !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!                                 | ;<br>1<br>1<br>1<br>1<br>1<br>1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |         | Thousands of Dollars | f Dollars  |
| Line | Frogram<br>Element<br>Number | Item                                                                   | Act                             | FY 1996                                 | N       | FY 1998              | FY 1999 C  |
| 37   | 0603260F                     | Intelligence Advanced Development                                      | 4                               | 4,680                                   | 4,686   | 4,738                | 4,709 U    |
| 38   | 0603319F                     | Airborne Laser Technology                                              | 4                               | 20,360                                  | 54,227  | 157,136              | 296,596 U  |
| 39   | 0603430F                     | Advanced MILSATCOM (SPACE)                                             | 4                               | 29,155                                  | 30,453  | 41,448               | 1 29,507 U |
| 40   | 0603432F                     | Polar Adjunct (SPACE)                                                  | 4                               | 58,458                                  | 59,537  | 29,585               | 30,643 U   |
| 41   | 0603434F                     | National Polar-orbiting Operational Environmental                      | 4                               | 17,371                                  | 27,668  | 51,504               | 113,234 U  |
| 42   | 0603441F                     | Satellite Sys (SPACE) Space Based Infrared Architecture (SPACE) - Dem/ | 4                               | 249,436                                 | 237,532 | 222,401              | 126,485 U  |
| 43   | 0603617F                     | Val<br>Command, Control, and Communication Applications                | 4                               | 6,041                                   | 4,179   | 7,650                | 7,926 U    |
| 44   | 0603742F                     | Combat Identification Technology                                       | 4                               | 2,833                                   | 4,059   | 1,395                | 6,401 U    |
| 45   | 0603790F                     | NATO Research and Development                                          | 4,                              |                                         | 9,783   | 13,433               | 11,341 U   |
| 46   | 0603800F                     | Joint Strike Fighter (JSF) - Dem/Val                                   | 4                               | 81,303                                  | 252,043 | 458,052              | 465,611 U  |
| 47   | 0603851F                     | Intercontinental Ballistic Missile - Dem/Val                           | 4                               | 19,690                                  | 46,037  | 32,837               | 31,951 U   |
| 48   | 0603852F                     | C-130J - Dem/Val                                                       | 4                               |                                         |         | 3,968                | D          |
| 49   | 0603853F                     | Evolved Expendable Launch Vehicle Program (SPACE)                      | 4                               | 36,894                                  | 42,333  | 63,260               | D          |
| 50   | 0603854F                     | Dem/val<br>Global Broadcast Service                                    | 4                               | 14,000                                  | 43,565  | 56,977               | 62,678 U   |
| 51   | . 0603855F                   | Space Architect Office                                                 | 4                               | 5,499                                   | 10,957  |                      | D          |
| 52   | 0604237F                     | Variable Stability In-Flight Simulator Test                            | 4                               |                                         | 1,338   |                      | D          |
| 53   | 0604327F                     | Aircrait<br>Hardened Target Munitions                                  | 4                               |                                         |         | 4,981                | D          |
| 54   | 0208030F                     | War Reserve Materiel - Ammunition                                      | 4                               |                                         |         |                      | 5,944 U    |
|      | Demonstra                    | Demonstration and Validation                                           |                                 | 545,720                                 | 828,397 | 1,149,365            | 1,223,026  |
|      |                              |                                                                        |                                 |                                         |         |                      |            |

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Department of the Air Force FY 1998/1999 R D T & E Program

| Exhibit R-1                    | Date: FEB 1997                                            |  |
|--------------------------------|-----------------------------------------------------------|--|
| FY 1998/1999 R D T & E Program | Appropriation: 3600 F Research Development Test & Eval AF |  |

| Appr | Appropriation:               | 3600 F Research Development Test & Eval AF       |                                             |           |           | Date: FEB 1997       |             |
|------|------------------------------|--------------------------------------------------|---------------------------------------------|-----------|-----------|----------------------|-------------|
| !    |                              |                                                  | 6  <br>1  <br>1  <br>6  <br>6  <br>8  <br>1 |           |           | Thousands of Dollars |             |
| Line | Flogram<br>Element<br>Number | Item                                             | Act                                         | FY 1996   | FY 1997   | FY 1998              | FY 1999 G   |
| 55   | 0604201F                     | Integrated Avionics Planning and Development     | ហ                                           | 14,745    | 17,726    | 16,494               | 7,884 U     |
| 56   | 0604218F                     | Engine Model Derivative Program (EMDP)           | ιΩ                                          | 714       | 675       | 741                  | 767 U       |
| 57   | 0604222F                     | Nuclear Weapons Support                          | Ŋ                                           | 4,516     | 5,655     | 4,782                | 5,005 U     |
| 58   | 0604226F                     | B-1B                                             | Ŋ                                           | 186,940   | 207,930   | 216,886              | 199,718 U   |
| 59   | 0604227F                     | Training Systems Development                     | Ω.                                          | 7,961     | 4,247     | 4,305                | 4,422 U     |
| 9    | 0604231F                     | C-17 Program                                     | Ŋ                                           | 71,956    |           |                      | D           |
| 61   | 0604233F                     | Specialized Undergraduate Pilot Training         | ស                                           | 59,089    | 75,680    | 80,238               | 67,183 U    |
| 62   | 0604239F                     | F-22 EMD                                         | ĸ                                           | 2,154,196 | 1,818,462 | 2,071,234            | 1,464,782 U |
| 63   | 0604240F                     | B-2 Advanced Technology Bomber                   | ហ                                           | 587,538   | 595,496   | 355,750              | 44,894 U    |
| 64   | 0604243F                     | Manpower, Personnel and Training Development     | ហេ                                          | 4,953     | 4,689     | 4,534                | 4,230 U     |
| 65   | 0604249F                     | Night/Precision Attack                           | ις                                          | 6,521     |           |                      | D           |
| 99   | 0604268F                     | Aircraft Engine Component Improvement Program    | Ŋ                                           | 96,107    |           |                      | Þ           |
| 67   | 0604270F                     | EW Development                                   | Ŋ                                           | 48,674    | 97,458    | 78,465               | 87,889 U    |
| 99   | 0604321F                     | Combat Intelligence System -EMD                  | Ŋ                                           | 3,619     | 2,791     |                      | D           |
| 69   | 0604441F                     | Space Based Infrared Architecture (SPACE) - EMD  | r                                           | 165,171   | 189,638   | 338,413              | 580,298 U   |
| 70   | 0604479F                     | Milstar LDR/MDR Satellite Communications (SPACE) | S                                           | 533,613   | 683,685   | 676,690              | 555,050 U   |
| 71   | 0604480F                     | Global Positioning System Block IIF (SPACE)      | Ŋ                                           | 18,530    | 35,406    | 71,094               | 67,853 U    |
| 72   | 0604600F                     | Munitions Dispenser Development                  | S                                           | 50,005    | 53,631    | 18,076               | 7,711 U     |
| 73   | 0604602F                     | Armament/Ordnance Development                    | 2                                           | 7,600     | 3,483     | 1,597                | 135 U       |
| 74   | 0604604F                     | Submunitions                                     | വ                                           | 4,843     | 4,769     | 4,956                | 4,902 U     |
|      |                              |                                                  |                                             |           |           |                      |             |

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Department of the Air Force FY 1998/1999 R D I & E Program

Exhibit R-1

|       |                              | TY CCCT /OCCT II                                                       | 4 2   | TT OAT CHI                                 |           |                      | 1 4       |
|-------|------------------------------|------------------------------------------------------------------------|-------|--------------------------------------------|-----------|----------------------|-----------|
| Appro | Appropriation:               | 3600 F Research Development Test & Eval AF                             |       |                                            |           | Date: FEB 1997       | 1997      |
| 1     |                              | 111111111111111111111111111111111111111                                |       | t ') t t t t t t t t t t t t t t t t t t t |           | Thousands of Dollars | Dollars   |
| Line  | Flogiam<br>Element<br>Number | Item                                                                   | Act   | FY 1996                                    | FY 1997   | FY 1998              | EY 1999 G |
| 75    | 0604617F                     | Air Base Operability                                                   | Ŋ     | 8,881                                      | 2,781     | 1,424                | 2,553 U   |
| 16    | 0604618F                     | Joint Direct Attack Munition                                           | Ŋ     | 80,555                                     | 36,993    | 19,553               | 12,450 U  |
| 77    | 0604703F                     | Aeromedical/Chemical Defense Systems                                   | 2     | 5,873                                      | 5,707     | 4,354                | 2,057 U   |
| 78    | 0604704F                     | Common Support Equipment Development                                   | 2     | 1,310                                      |           |                      | Þ         |
| 79    | 0604706F                     | Life Support Systems                                                   | 15    | 4,518                                      | 10,391    | 3,726                | 3,819 U   |
| 80    | 0604708F                     | Civil, Fire, Environmental, Shelter Engineering                        | Ŋ     | 2,580                                      | 2,617     | 2,698                | 2,770 σ   |
| 81    | 0604711F                     | Systems Survivability (Nuclear Effects)                                | Ŋ     | 35                                         | 35        |                      | Þ         |
| 82    | 0604727F                     | Joint Standoff Weapons Systems                                         | Ŋ     | 41,828                                     | 22,463    | 24,676               | 23,139 U  |
| 83    | 0604735F                     | Combat Training Ranges                                                 | ιΩ    | 12,744                                     | 21,926    | 20,331               | 14,875 U  |
| 84    | 0604740F                     | Computer Resource Technology Transition (CRTT)                         | ស     | 8,688                                      | 1,862     | 1,459                | 1,485 U   |
| 85    | 0604750F                     | Intelligence Equipment                                                 | Ŋ     | 1,256                                      | 1,167     | 1,287                | 1,326 υ   |
| 86    | 0604754F                     | Joint Tactical Information Distribution System                         | ιυ    | 9,077                                      | 29,321    | 8,557                | 8,616 U   |
| 87    | 0604770F                     | (O'ILDS) Joint Surveillance/Target Attack Radar System                 | Ŋ     | 154,939                                    | 215,210   |                      | Þ         |
| 88    | 0604779F                     | (JSTARS) Joint Interoperability of Tactical Command &                  | 22    | 5,771                                      | 5,606     | 5,929                | 5,940 U   |
| 89    | 0604851F                     | Control Systems (JINTACCS)<br>Intercontinental Ballistic Missile - EMD | ហេ    | 179,685                                    | 202,153   | 137,944              | n 066'98  |
| 06    | 0604853F                     | Evolved Expendable Launch Vehicle Program (SPACE)                      | ιΩ    |                                            |           | 28,376               | 293,950 U |
| 91    | 0207320F                     | - EMU<br>Sensor Fused Weapons                                          | ιΩ    |                                            |           | 19,804               | з,622 п   |
| 92    | 0207325F                     | Joint Air-to-Surface Standoff Missile (JASSM)                          | Ŋ     | 27,600                                     | 160,958   | 203,321              | 135,542 U |
| 93    | 0207414F                     | Combat Intelligence System                                             | ເດ    |                                            |           | 12,267               | 10,499 U  |
| 94    | 0303606F                     | UHF Satellite Communications                                           | ហ     | 12,492                                     |           |                      | Þ         |
| 95    | 0305176F                     | Combat Survivor Evader Locator                                         | Ŋ     |                                            |           | 4,315                | D         |
|       | Engineeri                    | Engineering and Manufacturing Development                              |       | 4,585,123                                  | 4,520,611 | 4,444,276            | 3,712,356 |
|       |                              | CH LA CATET A CATET                                                    | TETEN |                                            |           | Page F-5             |           |

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Exhibit R-1

| Program   Prog |      |         |                                           |     |                                         | 3 7 7 7 8 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | to Share Suche | 2246      |
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| Example                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | Program |                                           | 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 3<br>3<br>3<br>3<br>3<br>4<br>4<br>1<br>1<br>1    | Thousands of   | Dollars   |
| 0604326F         Threat Simulator Procedurent         6         44,731         43,439         42,241         3           0604326F         Threat Simulator Development         6         57,046         53,496         51,846         31,846           0604328F         Target Systems Development         6         5,049         4,762         4,780         4,780           0604328F         Major TEE Investment         6         23,862         21,061         21,786         21,786           060530F         Ranch Hand II Epidemiology Study         6         12,862         21,061         21,786         21,786           060530F         Ranch Hand II Epidemiology Study         6         12,862         10,933         10,933         10,933         10,933           060530F         Main I Development Instruction Research         6         12,487         12,106         38,948         38,9348         38           060530F         Mainton Prevention         6         436,454         414,901         389,348         38           060585F         Dilution Prevention         6         436,454         414,901         38,348         39           060586F         Divition Prevention         6         56,949         414,901         38,348                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Line |         | Item                                      | Act | FY 1996                                 | FY 1997                                           | FY 1998        | FY 1999   |
| 0604356F         Threat Simulator Development         6         57,046         53,496         51,846           0604358F         Target Systems Development         6         5,049         4,762         4,780           0604358F         Major T&E Investment         6         33,446         4,762         4,780           060530F         Ranch Band II Epidemiology Study         6         23,862         21,061         21,768           060530F         Ranch Band II Epidemiology Study         6         12,862         10,933         10,933           060530F         Ranch Band II Epidemiology Study         6         12,867         10,933         10,933           060530F         Ranch Band II Epidemiology Study         6         12,962         10,933         10,933           060530F         Initial Operational Test & Evaluation         6         22,948         21,464         28,3319         38,334           060583F         Development Planning         6         22,948         10,429         11,914         11,914           060588F         Development Planning         6         22,948         414,901         389,348         38           060588F         Development Planning         6         13,947         11,914         11,914                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 96   |         | Space Test Program (SPACE)                | 9   | 44,731                                  | 43,439                                            | 42,241         | 56,157 U  |
| 0604258F         Target Systems Development         6         5,049         4,762         4,780           0604759F         Major TeE Investment         6         38,446         32,340         47,336         47,789           0605101F         RAND Project Air Force         6         23,862         21,061         21,768         2           0605302F         Ranch Hand II Epidemiology Study         6         174,857         212,854         10,933           0605502F         Factor Air Defense BMCAI         6         12,362         12,010         2,1768           0605702F         Initial Operational Test & Evaluation         6         22,948         21,454         28,319           0605807F         Test and Evaluation Support         6         436,454         414,901         389,348           0605807F         Development Planning         6         6,437         6,144         6,049           0605807F         Development Planning         6         6,36,454         414,901         11,914         71,126           0605807F         Development Planning         6         6,437         6,436         11,914         71,126           0605807F         Development Planning         6         13,397         10,429         11,914                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 97   |         | Threat Simulator Development              | 9   | 57,046                                  | 53,496                                            | 51,846         | 36,238 U  |
| 0605101F         Major Tae Investment         6         38,446         32,340         47,336         4           0605101F         RAND Project Air Force         6         23,862         21,061         21,768         2           0605306F         Ranch Hand II Epidemiology Study         6         174,857         212,854         10,933         10,933           0605502F         Small Business Innovation Research         6         12,362         12,010         10,933         10,933           0605502F         Theater Air Defense EMACI         6         12,362         12,010         28,319         28,319         28,319         20,010           0605807F         Treat and Evaluation Support         6         6,437         6,194         6,049         389,348         389,348         38           0605803F         Development Planning         6         8,194         10,429         11,914         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 86   |         | Target Systems Development                | vo  | 5,049                                   | 4,762                                             | 4,780          | 4,818 U   |
| 0605101F         RAMD Project Air Force         6         23,862         21,061         21,768         2           0605306F         Ranch Hand II Epidemiology Study         6         3,006         8,842         10,933           0605502F         Small Business Innovation Research         6         12,362         12,010         10,933           0605702F         Theater Air Defense BMC4I         6         22,948         21,454         28,319         28,319           0605702F         Thitial Operational Test & Evaluation         6         436,454         414,901         389,348         38           0605807F         Test and Evaluation Support         6         6,137         6,194         6,049           0605807F         Development Planning         6         8,194         10,429         11,914         1           0605807F         Porlution Prevention         6         26,053         21,865         5,880         11,914         1           0605860F         Porlution Prevention         6         26,053         36,900         32,218         8,013           0605860F         Minor Construction (RPM) - RDT&E         6         26,053         32,918         8,013           060580F         Minor Construction (RPM) - RDT&E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 66   |         | Major T&E Investment                      | 9   | 38,446                                  | 32,340                                            | 47,336         | 43,809 U  |
| 060530F         Ranch Hand II Epidemiology Study         6         3,006         8,842         10,933           060550ZF         Small Business Innovation Research         6         174,857         212,854         10,933           060570ZF         Theater Air Defense BMC4I         6         12,362         12,010         28,319         28,319           060571ZF         Initial Operational Test & Evaluation         6         436,454         414,901         389,348         38           060580ZF         Test and Evaluation Support         6         436,454         414,901         389,348         38           060580ZF         Development Planning         6         6,437         6,194         6,049         11,914         1           060585ZF         Devilopmental Compliance         6         26,053         21,865         5,880         1           060585ZF         Buvironmental Compliance         6         26,053         21,865         17,126         5,880           06058GOF         Minor Construction (RPM) - RDT&E         6         36,900         32,218         8,013           06058GOF         Maintenance and Repair (RPM) - RDT&E         6         134,232         125,979         55,200           06058GOF         Real Property S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 100  |         | RAND Project Air Force                    | 9   | . 23,862                                | 21,061                                            | 21,768         | 21,594 U  |
| 0605502F         small Business Innovation Research         6         174,857         212,854           0605702F         Theater Air Defense BMC4I         6         12,362         12,010           0605712F         Initial Operational Test & Evaluation         6         22,948         21,454         28,319         38           0605807F         Test and Evaluation Support         6         6,437         6,194         6,049         6,049           0605807F         Development Planning         6         8,194         10,429         11,914         1           0605857F         Pollution Prevention         6         8,194         10,429         11,914         1           0605857F         Pollution Prevention         6         26,053         21,865         17,126         5,880           0605867F         Pollution Prevention         Rocket Systems Launch Program (SPACE)         6         26,053         21,865         17,126         5,880           0605867F         Maintenance and Repair (RPM) - RDT&E         6         36,900         32,218         8,013         1,853           0605867F         Real Property Services (RPS) - RDT&E         6         134,232         125,979         65,365         6           0605896F         Financin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 101  |         | Ranch Hand II Epidemiology Study          | 9   | 3,006                                   | 8,842                                             | 10,933         | 4,488 U   |
| 0605704F         Theater Air Defense BMC4I         6         12,362         12,010           0605712F         Initial Operational Test & Evaluation         6         22,948         21,454         28,319         28,319           0605807F         Test and Evaluation Support         6         436,454         414,901         389,348         38           0605807F         Test and Evaluation Support         6         6,437         6,194         6,049         6,049           0605807F         Development Planning         6         8,194         10,429         11,914         1           0605807F         Devisionmental Compliance         6         26,053         21,865         5,880         17,126         5,880           0605807F         Minor Construction (RPM) - RDT&E         6         36,900         32,218         8,013         1,853           060587F         Maintenance and Repair (RPM) - RDT&E         6         134,232         125,979         65,365         6           0605897F         Ral Property Services (RPS) - RDT&E         6         134,232         125,979         65,365         6           0605896F         Base Operations - RDT&E         6         2,996         125,979         65,365         6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 102  |         | Small Business Innovation Research        | v   | 174,857                                 | 212,854                                           |                | D         |
| 0605712F         Initial Operational Test & Evaluation         6         22,948         21,454         28,319         2           0605807F         Test and Evaluation Support         6         436,454         414,901         389,348         38           0605803F         Development Planning         6         6,437         6,194         6,049         6,049           060583F         Environmental Conservation         6         8,194         10,429         11,914         1           060585F         Environmental Compliance         6         26,053         21,865         17,126         2           060586F         Environmental Compliance         6         36,063         32,218         8,013         1,853           060586F         Minor Construction (RPM) - RDT&E         6         36,900         32,218         8,013           060587F         Maintenance and Repair (RPM) - RDT&E         6         134,232         125,979         65,365         6           060589F         Real Property Services (RPS) - RDT&E         6         134,232         125,979         65,365         6           060589G         Financing for Expired Account Adjustments         6         2,996         36,5365         6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 103  |         |                                           | 9   | 12,362                                  | 12,010                                            |                | D         |
| 0605807F         Test and Evaluation Support         6         436,454         414,901         389,348         38           0605808F         Development Planning         6         6,437         6,194         6,049         6,049         6,049         6,049         6,049         11,914         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 104  |         |                                           | 9   | 22,948                                  | 21,454                                            | 28,319         | 25,035 U  |
| 0605808F         Development Planning         6         4.437         6,194         6,049           0605854F         Environmental Conservation         6         8,194         10,429         11,914         1           0605854F         Pollution Prevention         6         26,053         21,865         17,126         2           0605856F         Environmental Compliance         6         26,053         21,865         17,126         2           0605860F         Rocket Systems Launch Program (SPACE)         6         36,900         32,218         8,013           0605876F         Minor Construction (RPM) - RDT&E         6         55,200         55,200           0605876F         Maintenance and Repair (RPM) - RDT&E         6         134,232         125,979         65,365         6           0605879F         Real Property Services (RPS) - RDT&E         6         134,232         125,979         65,365         6           0605896F         Financing for Expired Account Adjustments         6         26,996         5,996         65,365         6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 105  |         | Test and Evaluation Support               | 9   | 436,454                                 | 414,901                                           | 389,348        | 389,527 U |
| 0605853F         Environmental Conservation         6         8,194         10,429         11,914         1           0605854F         Pollution Prevention         6         13,397         19,756         5,880         5,880           0605856F         Environmental Compliance         6         26,053         21,865         17,126         2           0605876F         Minor Construction (RPM) - RDT&E         6         36,900         32,218         8,013           0605876F         Maintenance and Repair (RPM) - RDT&E         6         55,200         55,200           0605879F         Real Property Services (RPS) - RDT&E         6         134,232         125,979         65,365         6           0605896F         Financing for Expired Account Adjustments         6         2,996         65,365         6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 106  |         | Development Planning                      | 9   | 6,437                                   | 6,194                                             | 6,049          | 6,197 U   |
| 0605854F         Pollution Prevention         6         13,397         19,756         5,880           0605856F         Environmental Compliance         6         26,053         21,865         17,126         2           0605860F         Rocket Systems Launch Program (SPACE)         6         36,900         32,218         8,013           0605876F         Minor Construction (RPM) - RDT&E         6         1,853         1,853           0605878F         Maintenance and Repair (RPM) - RDT&E         6         55,200         5           0605879F         Real Property Services (RPS) - RDT&E         6         134,232         125,979         65,365         6           0605896F         Financing for Expired Account Adjustments         6         2,996         2,996         65,365         6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 107  |         | Environmental Conservation                | 9   | 8,194                                   | 10,429                                            | 11,914         | 12,752 U  |
| 0605856F         Environmental Compliance         6         26,053         21,865         17,126         2           0605860F         Rocket Systems Launch Program (SPACE)         6         36,900         32,218         8,013           0605876F         Minor Construction (RPM) - RDT&E         6         1,853         1,853           0605878F         Maintenance and Repair (RPM) - RDT&E         6         49,614         4           0605879F         Real Property Services (RPS) - RDT&E         6         134,232         125,979         65,365         6           0605896F         Financing for Expired Account Adjustments         6         2,996         2,996         65,365         6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 108  |         | Pollution Prevention                      | 9   | 13,397                                  | 19,756                                            | 5,880          | 4,314 U   |
| 0605860F         Rocket Systems Launch Program (SPACE)         6         36,900         32,218         8,013           0605876F         Minor Construction (RPM) - RDT&E         6         1,853         1,853           0605878F         Maintenance and Repair (RPM) - RDT&E         6         49,614         4           0605896F         Base Operations - RDT&E         6         134,232         125,979         65,365         6           0909900F         Financing for Expired Account Adjustments         6         2,996         2,996         6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 109  |         | Environmental Compliance                  | 9   | 26,053                                  | 21,865                                            | 17,126         | 21,705 U  |
| 0605876F         Minor Construction (RPM) - RDT&E         6         1,853           0605878F         Maintenance and Repair (RPM) - RDT&E         6         55,200           0605879F         Real Property Services (RPS) - RDT&E         6         49,614           0605896F         Base Operations - RDT&E         6         134,232         125,979         65,365           0909900F         Financing for Expired Account Adjustments         6         2,996         5,365                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 110  |         |                                           | 9   | 36,900                                  | 32,218                                            | 8,013          | 8,023 U   |
| 0605878F       Maintenance and Repair (RPM) - RDT&E       6         0605879F       Real Property Services (RPS) - RDT&E       6         0605896F       Base Operations - RDT&E       6         0909900F       Financing for Expired Account Adjustments       6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 111  |         | Minor Construction (RPM) - RDT&E          | 9   |                                         |                                                   | 1,853          | 1,941 U   |
| 0605879F       Real Property Services (RPS) - RDT&E       6         0605896F       Base Operations - RDT&E       6         0909900F       Financing for Expired Account Adjustments       6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 112  |         |                                           | Ġ   |                                         |                                                   | 55,200         | 57,503 U  |
| 0605896F Base Operations - RDT&E 6 134,232 125,979 65,365 0909900F Financing for Expired Account Adjustments 6 2,996                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 113  |         | (RPS)                                     | 9   |                                         |                                                   | 49,614         | 47,809 U  |
| 0909900F Financing for Expired Account Adjustments 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 114  |         |                                           | 9   | 134,232                                 | 125,979                                           | 65,365         | 63,188 U  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 115  |         | Financing for Expired Account Adjustments | 9   | 2,996                                   |                                                   |                | D         |

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# Department of the Air Force FY 1998/1999 R D T & E Program

Exhibit R-1

| Program   Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Appr  | :<br>u    | 3600 F Research Development Test & Eval AF             |     |                                       |                                       | Date: FEB 1997                                                                              | 1997      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|--------------------------------------------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------|-----------|
| Number   Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |       |           |                                                        |     |                                       |                                       | Thousands of Dollars                                                                        |           |
| Number   Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | J. no |           |                                                        | •   | ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; | # # # # # # # # # # # # # # # # # # # | :<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>: |           |
| International Activities   Experiment Support   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,04 | No    |           |                                                        | Act | FY 1996                               | FY 1997                               | FY 1998                                                                                     | FY 1999 c |
| Note   Management Support   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970   1,046,970    | 116   |           | International Activities                               | 9   |                                       |                                       | 3,715                                                                                       | 3,827 U   |
| Note Management Support         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,046,970         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048         1,048                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |       |           |                                                        |     | 1 1 1 1 1 1 1 1                       | E E E E E E E E E E E E E E E E E E E |                                                                                             | 1 1 1 1   |
| 0603110F         Technical Evaluation System         7           0603110F         Special Evaluation System         7           010113F         B-52 Squadrons         7         19,870           0101120F         Advanced Cruise Missile         7         6,743           0102326F         Region/Sector Operation Control Center         7         6,765           0102412F         North Atlantic Defense System         7         6,702           0207129F         F-111 Squadrons         7         6,702           0207131F         A-10 Squadrons         7         146,114           0207131F         F-15E Squadrons         7         160,917           0207131F         F-15E Squadrons         7         18,982           0207131F         F-11A Squadrons         7         18,982           0207131F         F-11A Squadrons         7         18,982           0207131F         F-11A Squadrons         7         18,982           0207131F         Tactical AIM Missiles         7         44,202           0207151F         Podded Reconnaissance System         7         3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       | RDT&E Man | agement Support                                        |     | 1,046,970                             | 1,041,600                             | 821,300                                                                                     | 808,925   |
| 0603110F         Special Evaluation System         7           0101113F         B-52 Squadrons         7         19,870           0101120F         Advanced Cruise Missile         7         6,743           0102325F         Joint Surveillance System         7         6,765           0102326F         Region/Sector Operation Control Center         7         6,702           0102412F         North Atlantic Defense System         7         564           0207129F         F-111 Squadrons         7         146,114           0207131F         A-10 Squadrons         7         160,917           0207134F         F-15E Squadrons         7         160,917           0207136F         Manned Destructive Suppression         7         160,917           0207141F         F-117A Squadrons         7         18,982           0207136F         Tactical AIM Missiles         7         18,982           0207151F         Tactical Aim Missiles         7         44,202           0207151F         Podded Reconnaissance System         7         3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 117   |           |                                                        | 7   |                                       |                                       |                                                                                             |           |
| 101113F       B-52 squadrons       7       19,870         010132F       Advanced Cruise Missile       7       6,743         0102335F       Joint Surveillance System       7       6,765         010241F       Region/Sector Operation Control Center       7       6,702         0102412F       North Atlantic Defense System       7       6,702         0102412F       North Warning System (NWS)       7       564         0207139F       F-11 Squadrons       7       146,114       1         0207131F       A-10 Squadrons       7       160,917       1         0207136F       Manned Destructive Suppression       7       160,917       1         0207136F       Tactical AIM Missiles       7       18,982         0207141F       Tactical AIM Missiles       7       44,202         0207157F       Podded Reconnaissance System       7       3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 118   |           | Special Evaluation System                              | 7   |                                       |                                       |                                                                                             |           |
| 0101120F         Advanced Cruise Missile         7         6,743           0102325F         Joint Surveillance System         7         6,050           0102326F         Region/Sector Operation Control Center         7         6,050           0102411F         North Atlantic Defense System         7         975           0207129F         F-111 Squadrons         7         564           0207131F         A-10 Squadrons         7         146,114           0207134F         F-15E Squadrons         7         160,917           0207136F         Manned Destructive Suppression         7         160,917           0207137F         F-117A Squadrons         7         18,982           0207141F         F-117A Squadrons         7         18,982           0207151F         Podded Reconnaissance System         7         44,202           0207217F         Podded Reconnaissance System         7         3,600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 119   |           | B-52 Squadrons                                         | 7   | 19,870                                | 10,612                                | 3,427                                                                                       | 3,765 U   |
| 0102325F         Joint Surveillance System         7         6,050           0102326F         Region/Sector Operation Control Center         7         6,702           0102411F         Modernization Program         7         975           0102412F         North Atlantic Defense System         7         975           0207129F         F-111 Squadrons         7         146,114           0207131F         A-10 Squadrons         7         160,917           0207134F         F-15E Squadrons         7         160,917           0207136F         Manned Destructive Suppression         7         160,917           0207136F         Tactical AIM Missiles         7         18,982           0207161F         Tactical AIM Missiles         7         18,982           0207151F         Podded Reconnaissance System         7         3,647           0207217F         Podded Reconnaissance System         7         3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 120   |           | Advanced Cruise Missile                                | 7   | 6,743                                 | 1,107                                 | 2,393                                                                                       | D         |
| 0102326F         Region/Sector Operation Control Center         7         6,702           0102411F         North Atlantic Defense System         7         6,702           0102412F         North Warning System (NWS)         7         975           0207129F         F-111 Squadrons         7         564           0207131F         A-10 Squadrons         7         146,114         1           0207134F         F-15E Squadrons         7         160,917         1           0207136F         Manned Destructive Suppression         7         160,917         1           0207141F         F-117A Squadrons         7         18,982           0207161F         Tactical AIM Missiles         7         18,982           0207163F         Advanced Medium Range Air-to-Air Missile (AMRAAM)         7         44,202           0207217F         Podded Reconnaissance System         7         3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 121   |           | Joint Surveillance System                              | 7   | 6,050                                 | 12,626                                | 2,020                                                                                       | 2,219 U   |
| 0102411F         ModeIntaction Frogram         7         6,702           0102412F         North Atlantic Defense System         7         975           0207129F         F-111 Squadrons         7         564           0207131F         A-10 Squadrons         7         146,114           0207134F         F-15E Squadrons         7         160,917           0207136F         Manned Destructive Suppression         7         10,208           0207141F         F-117A Squadrons         7         3,647           0207161F         Tactical AIM Missiles         7         18,982           0207163F         Advanced Medium Range Air-to-Air Missile (AMRAAM)         7         44,202           0207217F         Podded Reconnaissance System         7         3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 122   |           | Region/Sector Operation Control Center                 | 7   |                                       |                                       | 20,512                                                                                      | 14,065 U  |
| 0102412F         North Warning System (NWS)         7         975           0207129F         F-111 Squadrons         7         564           0207131F         A-10 Squadrons         7         146,114           0207133F         F-15E Squadrons         7         160,917           0207136F         Manned Destructive Suppression         7         10,208           0207141F         F-117A Squadrons         7         3,647           0207161F         Tactical AIM Missiles         7         18,982           0207163F         Advanced Medium Range Air-to-Air Missile (AMRAAM)         7         44,202           0207217F         Podded Reconnaissance System         7         3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 123   |           | Modernization Program<br>North Atlantic Defense System | 7   | 6,702                                 | 4,962                                 | 1,442                                                                                       | Þ         |
| 0207129F       F-111 Squadrons       7       564         0207131F       A-10 Squadrons       7       146,114       1         0207134F       F-15E Squadrons       7       160,917       1         0207136F       Manned Destructive Suppression       7       10,208         0207141F       F-117A Squadrons       7       3,647         0207161F       Tactical AIM Missiles       7       18,982         0207163F       Advanced Medium Range Air-to-Air Missile (AMRAAM)       7       44,202         0207117F       Podded Reconnaissance System       7       3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 124   |           |                                                        | 7   | 975                                   |                                       |                                                                                             | Þ         |
| 0207131F       A-10 Squadrons       7       146,114       1         0207134F       F-15E Squadrons       7       160,917       1         0207136F       Manned Destructive Suppression       7       10,208         0207141F       F-117A Squadrons       7       3,647         0207161F       Tactical AIM Missiles       7       18,982         0207163F       Advanced Medium Range Air-to-Air Missile (AMRAAM)       7       44,202         0207217F       Podded Reconnaissance System       7       3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 125   |           | F-111 Squadrons                                        | 7   | 564                                   |                                       |                                                                                             | Þ         |
| 0207133F       F-16 Squadrons       7       146,114       1         0207134F       F-15E Squadrons       7       160,917       1         0207136F       Manned Destructive Suppression       7       10,208         0207141F       F-117A Squadrons       7       3,647         0207151F       Tactical AIM Missiles       7       18,982         0207163F       Advanced Medium Range Air-to-Air Missile (AMRAAM)       7       44,202         0207217F       Podded Reconnaissance System       7       3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 126   |           | A-10 Squadrons                                         | 7   |                                       |                                       |                                                                                             | 2,358 U   |
| 0207134F         F-15E Squadrons         7         160,917         1           0207136F         Manned Destructive Suppression         7         10,208           0207141F         F-117A Squadrons         7         3,647           0207161F         Tactical AIM Missiles         7         18,982           0207163F         Advanced Medium Range Air-to-Air Missile (AMRAAM)         7         44,202           0207217F         Podded Reconnaissance System         7         3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 127   |           | F-16 Squadrons                                         | 7   | 146,114                               | 126,228                               | 100,233                                                                                     | 100,491 U |
| 0207136F         Manned Destructive Suppression         7         10,208           0207141F         F-117A Squadrons         7         3,647           0207161F         Tactical AIM Missiles         7         18,982           0207163F         Advanced Medium Range Air-to-Air Missile (AMRAAM)         7         44,202           0207217F         Podded Reconnaissance System         7         3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 128   |           | F-15E Squadrons                                        | 7   | 160,917                               | 150,981                               | 137,538                                                                                     | 109,798 U |
| 0207141F F-117A Squadrons 7 3,647 0207161F Tactical ALM Missiles 7 18,982 0207163F Advanced Medium Range Air-to-Air Missile (AMRAAM) 7 44,202 0207217F Podded Reconnaissance System 7 3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 129   |           |                                                        | 7   | 10,208                                | 11,821                                | 13,561                                                                                      | 2,492 U   |
| 0207161F Tactical AIM Missiles 0207163F Advanced Medium Range Air-to-Air Missile (AMRAAM) 7 44,202 0207217F Podded Reconnaissance System 7 3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 130   |           | F-117A Squadrons                                       | 7   | 3,647                                 | 11,797                                | 9,520                                                                                       | 5,251 U   |
| 0207163F Advanced Medium Range Air-to-Air Missile (AMRAAM) 7 44,202<br>0207217F Podded Reconnaissance System 7 3,000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 131   |           | Tactical AIM Missiles                                  | 7   | 18,982                                | 31,798                                | 53,171                                                                                      | 54,031 U  |
| 0207217F Podded Reconnaissance System 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 132   |           | Advanced Medium Range Air-to-Air Missile (AMRAAM)      | 7   | 44,202                                | 24,745                                | 50,781                                                                                      | 45,985 U  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 133   |           | Podded Reconnaissance System                           | 7   | 3,000                                 | 6,438                                 | 299                                                                                         | D         |

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Department of the Air Force FY 1998/1999 R D T & E Program

Exhibit R-1

| 134   2020742MP   AF TENCAD   AF TENCAD  | Appı           | Appropriation: | 3600 F Research Development Test & Eval AF    |     |         |                                         | Date: FEB                               | 1997      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|-----------------------------------------------|-----|---------|-----------------------------------------|-----------------------------------------|-----------|
| Name    |                | Drogram        |                                               |     |         |                                         | Thousands of                            | Dollars   |
| 0.207247P   AF TENCAP   AF TENCAP   AF TENCAP   AF TENCAP   0.207247P   AF TENCAP   AF T | Line           |                |                                               | ;   |         | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1         |
| 0207247F         AF TENCAP         1         20,556         19,102         15,251           0207248F         Special Evaluation Program         7         82,539         35,629         73,107           0207268F         Aircraft Engine Component Improvement Program         7         9,517         18,695         73,107           0207320F         Sensor Pused Weapons         7         6,677         2,875         93,122           0207312F         Adwaect Air Control Systems         7         2,875         96,877         93,122           0207312F         Adwaect Air Control Systems         7         1,910         325         46,807           0207312F         Airborne Warning and Control Systems         7         1,910         325         46,807           0207312F         Advanced Communications Systems         7         1,81         1,646         2,966           0207324F         Advanced Communications Systems         7         1,821         1,646         2,966           0207337F         Advanced Program Technology         7         140,350         66,355         95,056           0207338F         Theater Battle Management (TBM) C4I         7         140,350         66,355         14,011           0207597F         Advanc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | O <sub>N</sub> | Number         | ıtem                                          | Act |         | FY 1997                                 | FY 1998                                 | FY 1999 c |
| 0207248F         Special Evaluation Program         7         82,539         35,629         73,107           0207268F         Aircraft Engine Component Improvement Program         7         9,517         18,695         73,107           0207320F         Sensor Fused Weapons         7         2,875         9,704         93,122           0207323F         Accuract Engine Conventional Air-Launohed Cruise Missile         7         2,875         393           0207312F         Aixborne Warning and Control Systems         7         1,910         325         46,807           0207417F         Aixborne Warning and Control Systems         7         1,910         325         46,807           0207437F         Advanced Communications Systems         7         1,821         1,646         2,966           0207437F         Advanced Communications Systems         7         7,312         81,623         74,917           0207437F         Advanced Program Technology         7         140,350         66,355         95,056           0207438F         Advanced Program Technology         7         140,350         66,355         95,056           0207597F         Advanced Systems Improvements         7         13,674         15,107         17,116           020759                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 134            |                | AF TENCAP                                     | 7   | 20,556  | 19,102                                  | 15,251                                  | 16,277 U  |
| 0207368F         Aircraft Engine Component Improvement Program         7         9,517         19,695         93,122           0207320F         Sensor Fused Weapons         7         9,517         18,695         393           0207323F         AGM-86C Conventional Air-launched Cruise Missile         7         2,875         590         393           0207413F         Airbeater Air Control Systems         7         1,910         325         46,807           0207417F         Airbeater Air Control Systems         7         1,910         325         46,807           0207417F         Airbeater Air Control Systems         7         1,910         325         46,807           0207423F         Advanced Communications Systems         7         1,821         1,646         2,966           0207433F         Advanced Communications Systems         7         140,350         86,355         95,056           0207433F         Advanced Program Technology         7         140,350         86,355         95,056           020753BF         Advanced Program Technology         7         140,350         86,355         14,011         119,189           020753BF         Advanced Program Evaluation         7         13,654         15,075         14,011         119,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 135            |                | Special Evaluation Program                    | 7   | 82,539  | 35,629                                  | 73,107                                  | 82,212 U  |
| 0207320F         Sensor Pused Weapons         7         9,517         18,695           0207328F         Addw-86C Conventional Air-Launched Cruise Missile Systems         7         2,875         393           0207412P         Airborne Warning and Control Systems         7         1,910         325         46,807           0207413F         Airborne Warning and Control Systems         7         1,910         325         46,807           020743F         Advanced Communications Systems         7         1,821         1,646         2,966           020743F         Advanced Communications Systems         7         75,129         81,623         74,917           020743F         Combat Air Intelligence System Activities         7         7,385         95,056           020743F         Advanced Program Technology         7         140,350         66,355         95,056           020743F         Advanced Program Technology         7         27,403         32,766         24,013           020743F         Advanced Program Inprovements         7         56,571         119,189         119,189           020759F         Advanced Systems         7         13,654         15,075         17,716           020750F         Advanced Program Evaluation         7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 136            |                | Aircraft Engine Component Improvement Program | 7   |         | 92,704                                  | 93,122                                  | 93,921 U  |
| 0207323F         AGM-86C Conventional Air-Launohed Cruise Missile System         7         535         590         393           0207412F         Airborne Warning and Control Systems         7         1,910         325         46,807           0207413F         Airborne Warning and Control Systems         7         1,910         325         46,807           020743F         Airborne Warning and Control Systems         7         1,910         325         46,807           020743F         Advanced Communications Systems         7         1,821         1,646         2,966           020743F         Evaluation and Analysis Program         7         75,129         81,623         74,917           020743F         Combat Air Intelligence System Activities         7         140,350         66,355         95,056           020743F         Advanced Program Technology         7         27,403         32,766         24,013           020743F         Advanced Program Improvements         7         25,51         119,189           020759F         Advanced Systems Improvements         7         13,654         15,075         17,716           020759F         Advanced Program Evaluation         7         13,654         15,075         17,011         17,013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 137            |                | Sensor Fused Weapons                          | 7   | 9,517   | 18,695                                  |                                         | D         |
| 0207417F         Thetera Air Control Systems         7         535         590         393           0207417F         Airborne Warning and Control Systems         7         1,910         325         46,807           0207417F         Airborne Warning and Control Systems         7         1,910         325         46,807           0207423F         Advanced Communications Systems         7         1,910         325         46,807           0207437F         Tactical Airborne Command and Control Systems         7         7,329         81,623         74,917           0207437F         Combat Air Intelligence System Activities         7         7,385         95,056           0207437F         Advanced Program Technology         7         27,403         32,766         24,013           0207438F         Theater Battle Management (TBM) C4I         7         27,403         32,766         24,013           020759F         Advanced Systems Improvements         7         13,654         15,075         17,116           020759F         Advanced Systems Improvements         7         13,654         15,075         17,116           020759F         Advanced Program Evaluation         7         13,654         15,075         17,116           020759F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 138            |                | Conventional Ai                               | 7   |         | 2,875                                   |                                         | 22,091 U  |
| 0207417F         Airborne Warning and Control Systems         7         88,843         78,635         46,807           0207419F         Tactical Airborne Command and Control Systems         7         1,910         325         46,807           0207437F         Advanced Communications Systems         7         1,646         2,966         2,966           0207437F         Evaluation and Analysis Program         7         140,350         66,355         95,056           0207437F         Combat Air Intelligence System Activities         7         140,350         66,355         95,056           0207437F         Advanced Program Technology         7         27,403         32,766         24,013           0207438F         Theater Battle Management (TBM) C4I         7         27,403         32,766         24,013           0207539F         Advanced Systems Improvements         7         56,571         119,189         17,716           0207530F         Advanced Program Evaluation         7         13,5724         181,725         214,011         1           0207530F         Advanced Program Evaluation         7         135,724         181,725         214,011         1           0207050F         Mission Planning Systems         7         19,067         17,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 135            |                | Theater Air Control Systems                   | 7   | 535     | 590                                     | 393                                     | 440 U     |
| 0207419F         Tactical Airborne Command and Control Systems         7         1,910         325           0207423F         Advanced Communications Systems         7         1,821         1,646         2,966           0207424F         Evaluation and Analysis Program         7         1,821         1,646         2,966           0207431F         Evaluation and Analysis Program         7         7,385         74,917           0207433F         Advanced Program Technology         7         140,350         66,355         95,056           0207438F         Theater Battle Management (TBM) C4I         7         27,403         32,766         24,013           0207537F         Advanced Systems Improvements         7         56,571         119,189           0207597F         Advanced Program Evaluation         7         135,724         181,725         214,011         1           0207591F         Advanced Program Evaluation         7         135,724         181,725         214,011         1           0207591F         Advanced Program Evaluation         7         135,724         181,725         214,011         1           0208006F         Mission Planning Systems         7         19,067         17,635         16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 140            |                | Airborne Warning and Control System (AWACS)   | 7   | 88,843  | 78,635                                  | 46,807                                  | 29,266 U  |
| 0207423F         Advanced Communications Systems         7         1,821         1,646         2,966           0207424F         Evaluation and Analysis Program         7         75,129         81,623         74,917           0207437F         Combat Air Intelligence System Activities         7         140,350         66,355         95,056           0207433F         Advanced Program Technology         7         27,403         32,766         24,013           0207433F         Advanced Systems Improvements         7         56,571         119,189           0207539F         Advanced Systems Improvements         7         13,654         15,075         17,116           0207591F         Advanced Program Evaluation         7         135,724         181,725         214,011         1           0207591F         Advanced Program Evaluation         7         6,025         25,107         17,116           0207591F         Advanced Program Evaluation         7         6,025         25,107         21,718           0207501F         Mission Planning Systems         7         19,067         17,635         16,526           0208000F         Mission Planning Systems         7         19,067         17,635         16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 141            |                | Tactical Airborne Command and Control Systems | 7   | 1,910   | 325                                     |                                         | D         |
| 0207431F         Evaluation and Analysis Program         7         75,129         81,623         74,917           0207431F         Combat Air Intelligence System Activities         7         140,350         66,355         95,056           0207433F         Advanced Program Technology         7         27,403         32,766         24,013           0207438F         Theater Battle Management (TBM) C4I         7         27,403         32,766         24,013           0207591F         Advanced Systems Improvements         7         56,571         119,189           0207591F         Joint Surveillance and Target Attack Radar System         7         13,654         15,075         17,716           0207591F         Advanced Program Evaluation         7         135,724         181,725         214,011         1           0207591F         Mission Planning Systems         7         19,067         17,635         16,526           0208006F         Mission Planning Systems         7         19,067         17,635         16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 142            |                |                                               | 7   | 1,821   | 1,646                                   | 2,966                                   | 2,895 U   |
| 0207431F         Combat Air Intelligence System Activities         7         140,350         66,355         95,056           0207438F         Advanced Program Technology         7         140,350         66,355         95,056           0207438F         Theater Battle Management (TBM) C4I         7         27,403         32,766         24,013           0207539F         Advanced Systems Improvements         7         56,571         119,189           0207590F         Seek Eagle         7         13,654         15,075         17,716           0207591F         Advanced Program Evaluation         7         6,025         25,107         21,718           0207601F         USAF Modeling and Simulation         7         6,025         25,107         21,718           0208006F         Mission Planning Systems         7         19,067         17,635         16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 143            |                |                                               | 7   | 75,129  | 81,623                                  | 74,917                                  | 86,728 U  |
| 0207438F         Advanced Program Technology         7         140,350         66,355         95,056           0207438F         Theater Battle Management (TBM) C4I         7         27,403         32,766         24,013           020759F         Advanced Systems Improvements         7         56,571         119,189           020759IF         Joint Surveillance and Target Attack Radar System         7         13,654         15,075         17,716           020759IF         Advanced Program Evaluation         7         135,724         181,725         214,011         1           020759IF         Mission Planning Systems         7         6,025         25,107         21,718         16,526           020800IF         Information Warfare Support         7         19,067         17,635         16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 144            |                |                                               | 7   |         | 7,385                                   |                                         | D         |
| 0207438F         Theater Battle Management (TBM) C4I         7         27,403         32,766         24,013           0207579F         Advanced Systems Improvements         7         56,571         119,189           0207581F         Joint Stars)         7         13,654         15,075         17,716           0207590F         Seek Eagle         7         135,724         181,725         214,011         1           0207591F         Advanced Program Evaluation         7         6,025         25,107         21,718           0208006F         Mission Planning Systems         7         19,067         17,635         16,526           0208021F         Information Warfare Support         7         19,067         17,635         16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 145            |                | Advanced Program Technology                   | 7   | 140,350 | 66,355                                  | 95,056                                  | 62,609 U  |
| 020759F         Advanced Systems Improvements         7         56,571         119,189           0207581F         Cloint Surveillance and Target Attack Radar System         7         13,654         15,075         17,716           0207590F         Seek Eagle         7         135,724         181,725         214,011         1           0207591F         Advanced Program Evaluation         7         6,025         25,107         21,718           0208006F         Mission Planning Systems         7         19,067         17,635         16,526           0208021F         Information Warfare Support         7         19,067         17,635         16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 146            |                | Theater Battle Management (TBM) C4I           | 7   | 27,403  | 32,766                                  | 24,013                                  | 35,341 U  |
| 0207581F         Joint Surveillance and Target Attack Radar System 7         7         13,654         15,075         17,716           0207590F         Seek Eagle         7         135,724         181,725         214,011         1           0207591F         Advanced Program Evaluation         7         6,025         25,107         21,718           0208006F         Mission Planning Systems         7         19,067         17,635         16,526           0208021F         Information Warfare Support         7         19,067         17,635         16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 147            |                | Advanced Systems Improvements                 | 7   | 56,571  |                                         |                                         | Þ         |
| 0207590F       Seek Eagle       7       13,654       15,075       17,716         0207591F       Advanced Program Evaluation       7       135,724       181,725       214,011       1         0207601F       USAF Modeling and Simulation       7       6,025       25,107       21,718         0208006F       Mission Planning Systems       7       19,067       17,635       16,526         0208021F       Information Warfare Support       7       19,067       17,635       16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 148            |                |                                               | 7   |         |                                         | 119,189                                 | 84,458 U  |
| 0207591F       Advanced Program Evaluation       7       135,724       181,725       214,011       1         0207601F       USAF Modeling and Simulation       7       6,025       25,107       21,718         0208006F       Mission Planning Systems       7       19,067       17,635       16,526         0208021F       Information Warfare Support       7       10,067       17,635       16,526                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 149            |                | Seek Eagle                                    | 7   | 13,654  | 15,075                                  | 17,716                                  | 19,146 U  |
| 0207601F       USAF Modeling and Simulation       7       6,025       25,107       21,718         0208006F       Mission Planning Systems       7       19,067       17,635       16,526         0208021F       Information Warfare Support       7       7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 150            |                | Advanced Program Evaluation                   | 7   | 135,724 | 181,725                                 | 214,011                                 | 165,007 U |
| 0208006F         Mission Planning Systems         7         19,067         17,635         16,526           0208021F         Information Warfare Support         7         7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 151            |                | USAF Modeling and Simulation                  | 7   | 6,025   | 25,107                                  | 21,718                                  | 24,919 U  |
| 0208021F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 152            |                | Mission Planning Systems                      | 7   | 19,067  | 17,635                                  | 16,526                                  | 17,434 U  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 153            |                | Information Warfare Support                   | 7   |         |                                         |                                         |           |

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# Department of the Air Force FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | propriation:       | Appropriation: 3600 F Research Development Test & Eval AF          | 1   |                                         |         | Date: FEB 1997       | B 1997    |
|------|--------------------|--------------------------------------------------------------------|-----|-----------------------------------------|---------|----------------------|-----------|
|      | 1                  |                                                                    |     |                                         |         | Thousands of Dollars |           |
| Ţ    | Program<br>Element |                                                                    |     | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | t       |                      | ν σ       |
| NO   |                    | Item                                                               | Act | FY 1996                                 | FY 1997 | FY 1998              | FY 1999 C |
| 154  | 0208060F           | Theater Missile Defenses                                           | 7   | 24,059                                  | 30,585  | 29,182               | 31,682 п  |
| 155  | 0208160F           | Technical Evaluation System                                        | 7   |                                         | 107,983 | 105,645              | 112,413 U |
| 156  | 0208161F           | Special Evaluation System                                          | 7   |                                         | 39,054  | 40,344               | 52,348 U  |
| 157  | 0301310F           | Foreign Technology Division                                        | 7   |                                         |         |                      |           |
| 158  | 0301313F           | Defense Dissemination Program                                      | 7   |                                         |         |                      |           |
| 159  | 0301315F           | Missile and Space Technical Collection                             | 7   |                                         |         |                      |           |
| 160  | 0301324F           | FOREST GREEN                                                       | 7   |                                         |         |                      |           |
| 161  | 0301398F           | Management Headquarters GDIP                                       | 7   |                                         |         | 1,360                | 1,288 U   |
| 162  | 0303110F           | Defense Satellite Communications System (SPACE)                    | 7   | 33,477                                  | 27,279  | 10,547               | 17,589 U  |
| 163  | 0303131F           | Minimum Essential Emergency Communications                         | 7   | 13,068                                  | 20,842  | 34,409               | 29,019 U  |
| 164  | 0303140F           | Network (MEECN)<br>Information Systems Security Program            | 7   | 10,381                                  | 6,548   | 5,298                | 0,589 U   |
| 165  | 0303141F           | Global Combat Support System                                       | 7   |                                         |         | 20,894               | 18,334 U  |
| 166  | 0303144F           | Electromagnetic Compatibility Analysis Center                      | 7   | 1,500                                   | 7,307   | 7,844                | 7,973 U   |
| 167  | 0303152F           | (ECAC) World-Wide Military Command and Control Systems,            | 7   |                                         | 7,299   | 6,820                | 6,650 U   |
| 168  | 3 0303601F         | Information System Milstar Satellite Communications System (SPACE) | 7   | 40,678                                  | 19,289  | 12,871               | П 661,8   |
| 169  | 0304111F           | Special Activities.                                                | 7   |                                         |         |                      |           |
| 170  | 0304311F           | Selected Activities                                                | 7   |                                         |         | 3,000                | 3,000 U   |
| 171  | 0305110F           | Satellite Control Network (SPACE)                                  | 7   | 74,896                                  | 82,640  | 80,011               | 104,061 U |
| 172  | 0305111F           | Weather Service                                                    | 7   | 5,321                                   | 4,919   | 9,057                | 8,424 U   |
| 173  | 0305114F           | Air Traffic Control, Approach, and Landing System (ATCALS)         | 7   | 5,440                                   | 7,643   | 6,571                | 925 U     |
|      |                    |                                                                    |     |                                         |         |                      |           |

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Department of the Air Force FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation:               | 3600 F Research Development Test & Eval AF                      |     |         |                                         | Date: FEB 1997      | 1997      |
|------|------------------------------|-----------------------------------------------------------------|-----|---------|-----------------------------------------|---------------------|-----------|
| 1    |                              | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                         |     |         | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Thousands of Dollar |           |
| Line | Program<br>Element<br>Number | Item                                                            | Act | FY 1996 | FY 1997                                 | FY 1998             | FY 1999 C |
| 174  | 0305119F                     | Medium Launch Vehicles (SPACE)                                  | 7   | 16,614  | 12,720                                  | 5,719               | 14,623 U  |
| 175  | 0305128F                     | Security and Investigative Activities                           | 7   | 282     | 275                                     | 530                 | 467 U     |
| 176  | 0305137F                     | National Airspace System (NAS) Plan                             | 7   | 12,140  | 11,858                                  | 12,830              | 1,919 U   |
| 177  | 0305138F                     | Upper Stage Space Vehicles (SPACE)                              | 7   | 2,931   | 3,010                                   | 3,337               | 3,369 U   |
| 178  | 0305142F                     | Applied Technology and Integration                              | 7   |         |                                         |                     |           |
| 179  | 0305144F                     | Titan Space Launch Vehicles (SPACE)                             | 7   | 128,942 | 97,487                                  | 82,384              | 137,602 U |
| 180  | 0305145F                     | Arms Control Implementation                                     | 7   | 948     | 27,841                                  |                     | D         |
| 181  | 0305154F                     | Defense Airborne Reconnaissance Program                         | 7   | 29,558  | 4,750                                   |                     | D         |
| 182  | 0305158F                     | Tactical Terminal                                               | 7   | 2,872   | 2,799                                   | 258                 | 242 U     |
| 183  | 0305160F                     | Defense Meteorological Satellite Program (SPACE)                | 7   | 18,221  | 14,769                                  | 14,076              | 19,143 U  |
| 184  | 0305164F                     | NAVSTAR Global Positioning System (User                         | 7   | 16,314  | 29,810                                  | 46,300              | 068,890 U |
| 185  | 0305165F                     | Equipment) (SPACE) NAVSTAR Global Positioning System (Space and | 7   | 25,257  | 40,442                                  | 26,685              | 21,580 U  |
| 186  | 0305172F                     | Combined Advanced Applications                                  | 7   |         |                                         |                     |           |
| 187  | 0305182F                     | Eastern Space Launch Facility (ESLF) (SPACE)                    | 7   | 47,943  | 33,956                                  | 34,186              | 33,472 U  |
| 188  | 0305906F                     | NCMC - TW/AA System                                             | 7   | 56,712  | 29,466                                  | 7,362               | 5,036 U   |
| 189  | 0305910F                     | SPACETRACK (SPACE)                                              | 7   | 54,334  | 31,851                                  | 28,573              | 14,147 U  |
| 190  | 0305911F                     | Defense Support Program (SPACE)                                 | 7   | 33,969  | 25,009                                  | 23,193              | 39,946 U  |
| 191  | 0305913F                     | NUDET Detection System (SPACE)                                  | 7   | 12,064  | 13,018                                  | 14,145              | 14,982 U  |
| 192  | 0305917F                     | Space Architect                                                 | 7   |         |                                         | 14,590              | 14,590 U  |
| 193  | 0305953F                     | Evolved Expendable Launch Vehicle (EELV) (Space)                | 7   |         |                                         |                     | з, звз п  |
|      |                              |                                                                 |     |         |                                         |                     |           |

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Department of the Air Force FY 1998/1999 R D T & E Program

|       |                              | Department of the FY 1998/1999 R D T                    | the Air<br>D T & E | Air Force<br>& E Program |            | Exhib                | Exhibit R-1 |
|-------|------------------------------|---------------------------------------------------------|--------------------|--------------------------|------------|----------------------|-------------|
| Appro | Appropriation: 3             | 3600 F Research Development Test & Eval AF              |                    |                          |            | Date: FEB            | 8 1997      |
|       |                              |                                                         |                    |                          |            | Thousands of Dollars |             |
| Line  | Frogram<br>Element<br>Number | Item                                                    | Act                | FY 1996                  | FY 1997    | FY 1998              | FY 1999 C   |
| 194   | 0308610F                     | Information Management-Automation-Program 3             | 7                  | 062'6                    | 14,543     |                      | n           |
| 195   | 0401119F                     | C-5 Airlift Squadrons                                   | 7                  |                          | 1,124      | 9,751                | 14,204 U    |
| 196   | 0401130F                     | C-17 Aircraft                                           | 7                  |                          | 71,774     | 113,605              | 202,344 U   |
| 197   | 0401214F                     | Air Cargo Material Handling (463-L) (Non-IF)            | 7                  |                          | 3,145      | 7,947                | 522 U       |
| 198   | 0401218F                     | KC-135s                                                 | 7                  | 11,729                   | 715        | 1,992                | 1,704 U     |
| 199   | 0404102F                     | Aerospace Rescue and Recovery                           | 7                  | 5,097                    | 3,165      |                      | Þ           |
| 200   | 0702207F                     | Depot Maintenance (Non-IF)                              | 7                  | 1,414                    | 1,377      | 1,482                | 1,530 U     |
| 201   | 0708011F                     | Industrial Preparedness                                 | 7                  | 57,040                   | 50,632     | 48,429               | 45,923 U    |
| 202   | 0708026F                     | Productivity, Reliability, Availability,                | 7                  | 16,840                   | 15,842     | 1,032                | D 066       |
| 203   | 0708611F                     | Maintain, Frog Oic (FRAMPO) Support Systems Development | 7                  | 5,454                    | 8,107      | 3,657                | 3,767 U     |
| 204   | 0804734F                     | Cryptologic/SIGINT-Related Skill Training               | 7                  | 1,009                    | 1,781      | 1,427                | Þ           |
| 205   | 0901218F                     | Civilian Compensation Program                           | 7                  | 6,024                    | 5,793      | 6,497                | 6,756 U     |
| 206   | 1001004F                     | International Activities                                | 7                  | 3,583                    | 3,554      |                      | Þ           |
| 207   | 1001018F                     | NATO Joint STARS                                        | 7                  | 4,281                    |            | 36,061               | D 709,76    |
| 208   | 0207137F                     | Classified Program                                      | 7                  |                          |            |                      |             |
|       | Operation                    | Operational Systems Development                         |                    | 4,974,379                | 6,340,501  | 6,813,938            | 6,774,194   |
| Total |                              | Research Development Test & Eval AF                     |                    | 12,512,814               | 14,068,836 | 14,451,379           | 13,799,985  |

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## Defensewide FY 1998/1999 R D T & E Program

Summary Date: FEB 1997

Exhibit R-1

| Summary                                        |                   |                                         | Date: FEB 1997                          | / AA T      |
|------------------------------------------------|-------------------|-----------------------------------------|-----------------------------------------|-------------|
|                                                |                   |                                         | Thousands of                            | f Dollars   |
|                                                | FY 1996           | FY 1997                                 | FY 1998                                 | FY 1999     |
|                                                | 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 8 8 8 8 8   |
| Summary Recap of Budget Activities             |                   |                                         |                                         |             |
| Basic Research                                 | 329,603           | 337,821                                 | 355,869                                 | 371,898     |
| Applied Research                               | 1,220,288         | 1,132,827                               | 1,267,523                               | 1,372,820   |
| Advanced Technology Development                | 2,039,569         | 2,147,731                               | 2,160,232                               | 2,121,617   |
| Demonstration and Validation                   | 2,484,272         | 2,351,984                               | 1,759,547                               | 1,297,671   |
| Engineering and Manufacturing Development      | 590,216           | 1,043,349                               | 911,323                                 | 1,046,284   |
| RDT&E Management Support                       | 418,320           | 211,863                                 | 240,574                                 | 238,443     |
| Operational Systems Development                | 2,110,174         | 2,212,596                               | 2,374,612                               | 2,240,620   |
|                                                | 1 1 1 1 4 4 1 1   | 1 1 1 1                                 | 1 1 1 1 1 1 1 1 1                       |             |
| Total Research Development Test & Eval Defwide | 9,192,442         | 9,438,171                               | 089'690'6                               | 8,689,353   |
|                                                |                   |                                         |                                         |             |
| Summary Recap of FYDP Programs                 |                   |                                         |                                         |             |
| General Purpose Forces                         | 26,068            | 27,157                                  | 27,856                                  | 28,531      |
| Intelligence and Communications                | 2,009,053         | 2,031,078                               | 2,197,222                               | 2,058,177   |
| Research and Development (FYDP Program 6)      | 7,002,532         | 7,200,504                               | 6,680,990                               | 6,440,597   |
| Central Supply and Maintenance                 | 3,788             | 6,101                                   | 8,720                                   | 8,732       |
| Administration and Assoc Activities            | 3,999             | 31,066                                  | 34,356                                  | 34,985      |
| Support of Other Nations                       |                   |                                         | 1,993                                   | 1,991       |
| Special Operations Forces                      | 147,002           | 142,265                                 | 118,543                                 | 116,340     |
|                                                |                   | * * * * * * * * * * * * * * * * * * * * | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 |
| Total Research Development Test & Eval Defwide | 9,192,442         | 9,438,171                               | 9,069,680                               | 8,689,353   |
|                                                |                   |                                         |                                         |             |

# Defensewide FY 1998/1999 R D T & E Program

Date: FEB 1997 Exhibit R-1 Summary

|                                                                       |                                         |                                         | Illousands Of Portaria                  | Contract      |
|-----------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|---------------|
|                                                                       | FY 1996                                 | FY 1997                                 | FY 1998                                 | FY 1999       |
|                                                                       | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | : : : : : : : : : : : : : : : : : : : : | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1     |
| Summary Recap of Defensewide                                          |                                         |                                         |                                         |               |
| Defence Manning Agency                                                | 71,685                                  |                                         |                                         |               |
| procied cheretions Command                                            | 147,002                                 | 142,265                                 | 118,543                                 | 116,340       |
| Special Operations Communical Chemical and Biological Defense Program | 253,491                                 | 302,602                                 | 320,846                                 | 312,552       |
| National Imagery And Mapping Agency                                   |                                         | 000                                     | 200                                     | 2 272 580     |
| Ballistic Missile Defense Organization                                | 3,045,181                               | 3,3/3,391                               | 7,581,944                               | 2,2/2,309     |
| Office of Gerretary Mefense                                           | 1,745,197                               | 1,564,779                               | 1,804,816                               | 1,665,898     |
| Defense Advanced Research Projects Agey                               | 2,269,202                               | 2,140,436                               | 2,206,403                               | 2,271,934     |
| National Security Agency                                              |                                         |                                         | 100                                     | 100 110       |
| Defense Special Weapons Agency                                        | 259,628                                 | 21/,/83                                 | 295,341                                 | #100'T/7      |
| Defence Support Droject Office                                        | 54,769                                  | 78,280                                  | 49,403                                  | 41,854        |
| JOHNSON DEFENT THOUSE CENTROL                                         | 5,526                                   | 35,836                                  | 67,189                                  | 59,924        |
| Defense Information Systems Agency                                    | 60,630                                  | 65,802                                  | 55,845                                  | 57,980        |
| Defense Intelligence Agency                                           |                                         |                                         |                                         |               |
| Central Imagery Office                                                |                                         |                                         |                                         | 27.00         |
| Defense Logistics Agency                                              | 74,479                                  | 83,848                                  | 102,166                                 | 45, L57       |
| Defence Investigative Service                                         | 402                                     | 412                                     | 419                                     | 418           |
|                                                                       | 1 1 1 1 1 1                             | 1 1 1 1 1 1 1                           | ;<br>;<br>;<br>;<br>;<br>;              | 1 1 1 1 1 1 1 |
| Total Research Development Test & Eval Defwide                        | 9,192,442                               | 9,438,171                               | 9,069,680                               | 8,689,353     |
| •                                                                     |                                         |                                         |                                         |               |
|                                                                       |                                         |                                         |                                         |               |

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## Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1

Date: FEB 1997 Appropriation: 0400 D Research Development Test & Eval Defwide

|      | 1                  |                                                                    | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 6<br>6<br>6<br>6<br>6<br>6<br>6<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8<br>8 |                                       | Thousands of Dollars                  | !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!! |
|------|--------------------|--------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|-----------------------------------------|
| Line | Program<br>Element |                                                                    | :                                       |                                                                                                  | * * * * * * * * * * * * * * * * * * * | ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! | 0 U                                     |
| No   |                    | Item                                                               | Act                                     | FY 1996                                                                                          | FY 1997                               | FY 1998                               | FY 1999 C                               |
| Н    | . 0601101D         | In-House Laboratory Independent Research                           | н                                       | 3,368                                                                                            | 3,099                                 | 2,169                                 | 2,212 U                                 |
| 73   | 0601101E           | Defense Research Sciences                                          | Н                                       | 76,459                                                                                           | 90,701                                | 600'92                                | 80,936 U                                |
| m    | 0601103D           | University Research Initiatives                                    | т                                       | 214,876                                                                                          | 214,696                               | 237,788                               | 247,188 U                               |
| 4    | 0601110D           | Focused Research Initiatives                                       | н                                       | 8,372                                                                                            |                                       |                                       | Þ                                       |
| ιΩ   | 06011110           | Government/Industry Cosponsorship of University                    | 1                                       |                                                                                                  | ·                                     | 14,713                                | 15,544 U                                |
| 9    | 0601384BP          | nescalon<br>Chemical and Biological Defense Program                | Н                                       | 26,528                                                                                           | 29,325                                | 25,190                                | 26,018 U                                |
|      | Basic Research     | earch                                                              |                                         | 329,603                                                                                          | 337,821                               | 355,869                               | 371,898                                 |
| 7    | 0602110E           | Next Generation Internet                                           | 7                                       |                                                                                                  |                                       | 40,000                                | 40,000 U                                |
| ω    | 0602160D           | Counterproliferation Support                                       | 7                                       | 13,599                                                                                           |                                       |                                       | Þ                                       |
| σ    | 06021730           | Support Technologies - Applied Research                            | 7                                       | 96,092                                                                                           | 102,510                               | 101,932                               | 95,488 U                                |
| 10   | 0602227D           | Medical Free Electron Laser                                        | 7                                       | 24,344                                                                                           | 19,934                                | 20,841                                | 21,640 U                                |
| 11   | . 0602228D         | Historically Black Colleges and Universities                       | 7                                       | 13,572                                                                                           | 10,876                                | 11,485                                | 14,664 U                                |
| 12   | 0602234D           | (nbc)) Science and Engineer<br>Lincoln Laboratory Research Program | 7                                       | 13,730                                                                                           | 19,554                                | 20,474                                | 21,147 U                                |
| 13   | 0602301E           | Computing Systems and Communications Technology                    | 73                                      | 361,528                                                                                          | 314,969                               | 341,752                               | 371,471 U                               |
| 14   | 0602383E           | Biological Warfare Defense                                         | 7                                       |                                                                                                  |                                       | 61,600                                | 61,800 U                                |
| 15   | 0602384BP          | Chemical and Biological Defense Program                            | 7                                       | 68,565                                                                                           | 67,852                                | 60,023                                | 58,360 U                                |
| 16   | 0602702E           | Tactical Technology                                                | 7                                       | 120,440                                                                                          | 121,520                               | 157,329                               | 177,995 U                               |
| 17   | 0602708臣           | Integrated Command and Control Technology                          | Ø.                                      | 44,395                                                                                           | 59,672                                | 37,000                                | 40,000 U                                |
| 18   | 3 0602712E         | Materials and Electronics Technology                               | 7                                       | 227,848                                                                                          | 213,843                               | 192,192                               | 236,730 U                               |
|      |                    |                                                                    |                                         |                                                                                                  |                                       |                                       |                                         |

Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1 App

| Appr |                                | 0400 D Research Development Test & Eval Defwide               |                       |           |           | Date: FEB            | 7 TAA /   |
|------|--------------------------------|---------------------------------------------------------------|-----------------------|-----------|-----------|----------------------|-----------|
| 1    |                                |                                                               | !<br>!<br>!<br>!<br>! |           |           | Thousands of Dollars | f Dollars |
| Line | Program<br>: Element<br>Number | Item                                                          | Act                   | FY 1996   | FY 1997   | FY 1998              | 0 1       |
| 19   | 0602715H                       | Defense Special Weapons Agency                                | 7                     | 227,320   | 192,298   | 211,971              | 221,702 U |
| 20   | 0602787D                       | Medical Technology                                            | 2                     | 7,150     | 7,985     | 8,987                | 9,810 U   |
| 21   | 0305108K                       | Command and Control Research                                  | 2                     | 1,705     | 1,814     | 1,937                | 2,013 U   |
|      | Applied Research               | esearch                                                       |                       | 1,220,288 | 1,132,827 | 1,267,523            | 1,372,820 |
| 22   | 0603002D                       | Medical Advanced Technology                                   | я                     | 3,899     | 3,276     | 2,778                | 2,191 U   |
| 23   | 0603104D                       | Explosives Demilitarization Technology                        | ю                     | 14,265    | 11,754    | 12,259               | 12,541 U  |
| 24   | 0603105D                       | Military HIV Research                                         | ю                     | 18,589    |           |                      | Þ         |
| 25   | 0603120D                       | Demining                                                      | ٣                     |           | 14,369    | 7,663                | 7,592 U   |
| 26   | 0603121D                       | Alternative to Landmines                                      | м                     |           |           | 2,990                | 4,977 U   |
| 27   | 7 0603122D                     | Counterterror Technical Support                               | е                     | 16,656    | 21,098    | 34,863               | 37,057 U  |
| 28   | 3 0603160D                     | Counterproliferation Support - Adv Dev                        | т                     | 61,680    | 57,108    | 58,264               | 57,496 U  |
| 29   | 0603173C                       | Support Technologies - Advanced Technology                    | ю                     | 130,611   | 251,294   | 147,557              | 144,902 U |
| 30   | 0603225D                       | Development<br>Joint DoD-DoE Munitions Technology Development | ٣                     | 20,675    | 17,743    | 16,141               | 16,354 U  |
| 31   | L 0603226E                     | Experimental Evaluation of Major Innovative                   | ю                     | 580,359   |           |                      | D         |
| 32   | 2 0603232D                     | Technologies<br>Automatic Target Recognition                  | т                     |           | 4,716     | 4,789                | 4,746 U   |
| 33   | 3 0603384BP                    | O                                                             | ю                     | 26,896    | 43,092    | 41,223               | 40,581 U  |
| 34   | 1 0603569E                     | Advanced Development<br>Advanced Submarine Technology         | ю                     | 30,797    |           |                      | D         |
| 35   | 5 0603570E                     | Defense Reinvestment                                          | m                     | 177,852   |           |                      | b         |
| 36   | 5 0603704D                     | Special Technical Support                                     | ю                     | 16,895    | 17,252    | 11,750               | 11,896 U  |
|      |                                |                                                               |                       |           |           |                      |           |

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# Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation: | 0400 D Research Development Test & Eval Defwide  |     |         |         | Date: FEB    | 1997      |
|------|----------------|--------------------------------------------------|-----|---------|---------|--------------|-----------|
|      | Program        |                                                  | 1 1 |         |         | Thousands of | Dollars   |
| Line |                | Item                                             | Act | FY 1996 | FY 1997 | FY 1998      | 6 6       |
| 37   | 0603711H       | Verification Technology Demonstration            | ю   | 32,308  | 25,485  | 83,370       | 50,232 U  |
| 38   | 06037128       | Generic Logistics R&D Technology Demonstrations  | ю   | 13,883  | 19,357  | 17,267       | 17,788 U  |
| 39   | 0603716D       | Strategic Environmental Research Program         | ю   | 54,436  | 53,475  | 54,874       | 57,185 U  |
| 40   | 0603726D       | Joint Technology Insertion Program               | ო   | 3,228   |         |              | n         |
| 41   | 0603727D       | Joint Warfighting Program                        | ю   |         |         | 14,172       | 22,833 U  |
| 42   | 0603728D       | Agile Port Demonstration                         | ĸ   |         | 4,897   |              | n         |
| 43   | 0603729D       | Rocket Launch Facility Upgrades                  | ю   |         | 9,795   |              | D         |
| 44   | 0603730D       | Airfield Surface Traffic Monitoring              | m   |         | 1,959   |              | Д         |
| 45   | 0603738D       | Cooperative DoD/VA Medical Research              | m   | 23,283  | 21,334  |              | D         |
| 46   | 0603739E       | Advanced Electronics Technologies                | ю   | 389,610 | 360,288 | 277,044      | 282,668 U |
| 47   | 0603744臣       | Advanced Simulation                              | m   | 4,809   |         |              | Þ         |
| 48   | 0603745瓦       | Semiconductor Manufacturing Technology           | т   | 85,014  |         |              | Þ         |
| 49   | 0603746E       | Maritime Technology                              | ю   | 46,351  | 49,021  | 37,408       | 12,592 U  |
| 20   | 0603747E       | Electric Vehicles                                | m   | 14,694  | 14,707  |              | Þ         |
| 51   | 0603750D       | Advanced Concept Technology Demonstrations       | т   | 37,438  | 56,972  | 121,076      | 139,458 U |
| 52   | 0603752D       | Commercial Technology Insertion Program          | ж   |         | 9,744   | 47,889       | 47,457 U  |
| 53   | 06037538       | Electronic Commerce Resource Centers             | ю   |         |         | 14,972       | Þ         |
| 54   | 0603755D       | High Performance Computing Modernization Program | e   | 111,620 | 122,900 | 126,211      | 148,852 U |
| 55   | 0603760E       | Command, Control and Communications Systems      | т   |         | 102,996 | 163,800      | 172,600 U |
| 26   | 0603761E       | Communication and Simulation Technology          | 3   |         | 127,080 | 75,938       | 72,114 U  |

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Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1

| Appro | Appropriation: 0  | 0400 D Research Development Test & Eval Defwide                         |     |           |                                         | Date: FEB 1997                          | 1997      |
|-------|-------------------|-------------------------------------------------------------------------|-----|-----------|-----------------------------------------|-----------------------------------------|-----------|
| 1 1   | 1 1 1 1 1 1 1 1   | 1 2 2 2 2 3 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5                       | 1   | <br>      |                                         | Thousands of Dollars                    | Dollars   |
|       | Program           |                                                                         | ;   |           | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | O 0       |
| No    | Element<br>Number | Item                                                                    | Act | FY 1996   | FY 1997                                 | FY 1998                                 | FY 1999 c |
| 7.2   | 37628             | Sensor and Guidance Technology                                          | m   |           | 108,360                                 | 166,855                                 | 200,582 U |
| 00    | 0603763E          | Marine Technology                                                       | m   |           | 40,976                                  | 69,143                                  | 88,788 U  |
| 20    | 0603764臣          | Land Warfare Technology                                                 | ю   |           | 63,222                                  | 82,580                                  | п 868'96  |
| 9     | 0603765E          | Classified DARPA Programs                                               | т   |           | 178,040                                 | 134,977                                 | 65,500 U  |
| 61    | 0603800E          | Joint Strike Fighter (JSF) - Dem/Val                                    | m   | 28,917    | 72,865                                  | 23,900                                  | Þ         |
| 62    | 0603805E          | Dual Use Applications Programs                                          | т   |           | 181,184                                 | 225,000                                 | 225,000 U |
| 63    | 0603832D          | Joint Wargaming Simulation Management Office                            | ю   | 72,183    | 59,331                                  | 71,338                                  | 74,614 U  |
| 64    | 0303132G          | Global Grid Communications                                              | ю   |           |                                         |                                         |           |
| 65    | 0304211G          | National Activities                                                     | m   |           |                                         |                                         |           |
| 99    | 0305166G          | Special Development                                                     | ю   |           |                                         |                                         |           |
|       | Advanced          | Advanced Technology Development                                         |     | 2,039,569 | 2,147,731                               | 2,160,232                               | 2,121,617 |
| 67    | 0603228D          | Physical Security Equipment                                             | 4   | 19,096    | 23,198                                  | 31,553                                  | 32,536 U  |
| 89    | 0603708D          | Integrated Diagnostics                                                  | 4   | 9,540     | 9,492                                   | 6,514                                   | 0,650 U   |
| 69    | 06037090          | Joint Robotics Program                                                  | 4   | 21,038    | 29,159                                  | 23,196                                  | 24,694 U  |
| 70    | 0603714D          | Advanced Sensor Applications Program                                    | 4   | 24,539    | 24,937                                  | 15,379                                  | 15,744 U  |
| 71    | 0603736D          | CALS Initiative                                                         | 4   | 24,476    | 15,527                                  | 1,916                                   | 1,899 υ   |
| 72    | 0603790D          | NATO Research and Development                                           | 4   | 21,840    | 9,744                                   | 13,584                                  | 11,262 U  |
| 73    | 0603851D          | Environmental Security Technical Certification                          | 4   | 25,257    | 21,587                                  | 15,164                                  | 17,422 U  |
| 74    | 0603861C          | Program<br>Theater High-Altitude Area Defense System - TMD ·<br>Dem/Val | 4   | 565,818   | 341,307                                 | 294,647                                 | 16,778 U  |

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# Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1

| Appı   | Appropriation: (             | 0400 D Research Development Test & Eval Defwide             |     |           |           | Date: FEB 1997       | B 1997    |
|--------|------------------------------|-------------------------------------------------------------|-----|-----------|-----------|----------------------|-----------|
| !<br>! |                              |                                                             |     |           | 1         | Thousands of Dollars |           |
| Line   | Flogram<br>Element<br>Number | Item                                                        | Act | FY 1996   | FY 1997   | FY 1998              | FY 1999 C |
| 75     | 06038630                     | HAWK System BM/C3 - Dem/Val                                 | 4   | 22,819    |           |                      | D         |
| 16     | 0603864C                     | Theater Missile Defense BM/C3 - Dem/Val                     | 4   | 27,147    |           |                      | Þ         |
| 77     | 06038670                     | Navy Area Theater Missile Defense - Dem/Val                 | 4   | 277,565   | 59,315    |                      | Þ         |
| 78     | 06038680                     | Navy Theater Wide Missile Defense - Dem/Val                 | 4   | 200,442   | 304,171   | 194,898              | 192,073 U |
| 79     | 06038690                     | Meads Concepts - Dem/Val                                    | 4   | 20,123    | 56,232    | 47,956               | D 605'6   |
| 80     | 0603870C                     | Boost Phase Intercept Theater Missile Defense               | 4   |           | 23,276    | 12,885               | D         |
| 81     | . 0603871C                   | Acquisition - Dem/Val<br>National Missile Defense - Dem/Val | 4   | 730,656   | 828,864   | 504,091              | 393,085 U |
| 82     | 0603872C                     | Joint Theater Missile Defense - Dem/Val                     | 4   | 429,137   | 506,492   | 542,619              | 514,109 U |
| 83     | 0603884BP                    | Chemical and Biological Defense Program - Dem/Val           | 4   | 34,889    | 48,492    | 55,145               | 61,910 U  |
| 84     | 0603892D                     | ASAT                                                        | 4   | 28,534    | 48,975    |                      | n         |
| 85     | 0208043J                     | ISLAND SUN                                                  | 4   | 1,356     | 1,216     |                      | n         |
|        | Demonstrat                   | Demonstration and Validation                                |     | 2,484,272 | 2,351,984 | 1,759,547            | 1,297,671 |
| 86     | 0604160D                     | Counterproliferation Support - EMD                          | rs  | 2,647     | 2,583     |                      | D         |
| 87     | 0604384BP                    | Chemical and Biological Defense Program - EMD               | S   | 89,606    | 97,476    | 120,535              | 108,006 U |
| 88     | 0604771D                     | Joint Tactical Information Distribution System              | 2   | 57,886    | 43,360    | 55,429               | 31,633 U  |
| 89     | 0604861C                     | (011DS) Theater High-Altitude Area Defense System - TMD -   | വ   |           | 277,508   | 261,480              | 578,467 U |
| 90     | 0604864C                     | Theater Missile Defense BM/C3 - EMD                         | ស   | 10,118    |           |                      | n         |
| 91     | . 0604865C                   | Patriot PAC-3 Theater Missile Defense Acquisition           | ເດ  | 352,547   | 381,092   | 206,057              | 101,430 U |
| 92     | 0604866C                     | PAC-3 Risk Reduction - EMD                                  | 2   | 23,358    |           |                      | Þ         |
|        |                              |                                                             |     |           |           |                      |           |

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## Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1

| Appro    | opriation: 0       | Appropriation: 0400 D Research Development Test & Eval Defwide    |                                         |                                             |                                         | Date: FEB 1997                        |           |
|----------|--------------------|-------------------------------------------------------------------|-----------------------------------------|---------------------------------------------|-----------------------------------------|---------------------------------------|-----------|
| 1        |                    | ,                                                                 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                                             | 1                                       | Thousands of Dollars                  |           |
| Line     | Program<br>Element |                                                                   |                                         | 1 1 2 0 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | 11 100 1                                |                                       |           |
| NO<br>NO | Number             | ltem                                                              | Act                                     | F.Y. LUYO                                   | / F F F F F F F F F F F F F F F F F F F | H H H H H H H H H H H H H H H H H H H |           |
| 93       | 0604867C           | Navy Area Theater Missile Defense - EMD                           | S                                       |                                             | 241,330                                 | 267,822                               | 226,748 U |
| 94       | 0305106LC          | Consolidated Imagery Activities                                   | 2                                       |                                             |                                         |                                       |           |
| 95       | 0305107LC          | Tactical Imagery Activities                                       | 2                                       |                                             |                                         |                                       |           |
| 96       | 0305889D           | Counterdrug Intelligence Support                                  | ហេ                                      | 12,614                                      |                                         |                                       | D         |
|          | Engineerin         | Engineering and Manufacturing Development                         |                                         | 590,216                                     | 1,043,349                               | 911,323                               | 1,046,284 |
| 97       | 0605104D           | Technical Studies, Support and Analysis                           | 9                                       | 30,251                                      | 30,447                                  | 38,376                                | 40,355 U  |
| 86       | 0605110D           | Technical Support to USD(A) Critical Technology                   | 9                                       | 2,464                                       | 2,673                                   | 2,690                                 | 2,777 U   |
| 66       | 0605114E           | BLACK LIGET                                                       | 9                                       | 4,623                                       | 4,638                                   | 4,683                                 | 5,000 U   |
| 100      | 0605117D           | Foreign Material Acquisition and Exploitation                     | 9                                       | 43,772                                      | 39,707                                  | 37,474                                | 38,380 U  |
| 101      | 0605126J           | Joint Theater Air and Missile Defense Organizatio                 | 9                                       |                                             |                                         | 23,100                                | 17,850 U  |
| 102      | 0605128D           | Classified Program USD(P)                                         | 9                                       | 3,700                                       | 11,108                                  | 5,979                                 | 1,692 U   |
| 103      | 0605160D           | Counterproliferation Support                                      | 9                                       | 6,322                                       | 8,343                                   | 7,047                                 | 8,508 U   |
| 104      | 0605218C           | Ballistic Missile Defense RDT&E Program                           | ø                                       | 158,748                                     |                                         |                                       | Þ         |
| 105      | 0605384BP          | Management and Support<br>Chemical and Biological Defense Program | 9                                       | 7,007                                       | 16,365                                  | 18,730                                | 17,677 U  |
| 106      | 0605502D           | Small Business Innovative Research                                | 9                                       | 27,239                                      |                                         |                                       | D         |
| 107      | 0605502E           | Small Business Innovative Research                                | 9                                       | 42,390                                      |                                         |                                       | Þ         |
| 108      | 0605710D           | Classified Programs - C3I                                         | 9                                       | 424                                         | 2,252                                   | 357                                   | 448 U     |
| 109      | 0605790D           | Small Business Innovative Research Administration                 | 9                                       | 1,456                                       | 1,586                                   | 1,738                                 | 1,859 υ   |
| 110      | 06057988           | Defense Support Activities                                        | 9                                       | 16,858                                      | 13,121                                  | 5,992                                 | e,056 U   |
|          |                    |                                                                   |                                         |                                             |                                         |                                       |           |

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### Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1

Date: FEB 1997 Appropriation: 0400 D Research Development Test & Eval Defwide

| •    | Program   |                                                               |     |         |         | Thousands of Dollars                  |           |
|------|-----------|---------------------------------------------------------------|-----|---------|---------|---------------------------------------|-----------|
| Line |           |                                                               |     |         |         | : : : : : : : : : : : : : : : : : : : | S         |
| No   |           | Item                                                          | Act | FY 1996 | FY 1997 | FY 1998                               | FY 1999 C |
| 111  | 06058018  | Defense Technical Information Center                          | 9   | 39,950  | 43.382  | 46.930                                | 11 171 11 |
| 112  | 06058038  | R&D in Support of DoD Enlistment. Testing and                 | v   |         | 800     | 0 0                                   |           |
| 113  | E0000     | Evaluation                                                    |     |         | 7,00,1  | 607/0                                 | 8,410 U   |
| 113  |           | Management Headquarters (Research and Development             | vo  | 33,116  | 36,354  | 39,193                                | 41,260 U  |
|      | RDT&E Man | RDT&E Management Support                                      |     | 418,320 | 211,863 | 240,574                               | 238,443   |
| 114  | 0208045K  | C3 Interoperability                                           | 7   | 24,712  | 24,941  | 25,670                                | 26,648 U  |
| 115  | 02080527  | Joint Analytical Model Improvement Program                    | 7   |         | 1,000   | 2,186                                 | 1,883 U   |
| 116  | 0301011G  | Cryptologic Activities                                        | 7   | ,       |         |                                       |           |
| 117  | 0301301L  | General Defense Intelligence Program                          | 7   |         |         |                                       |           |
| 118  | 0302016K  | National Military Command System-Wide Support                 | 7   | 1,995   | 1,978   | 2,064                                 | 2,099 U   |
| 119  | 0302019K  | Joint/Defense Information Systems Engineering and Integration | 7   | 3,622   | 4,468   | 4,721                                 | 4,971 U   |
| 120  | 0303126K  | Long-Haul Communications (DCS)                                | 7   | 17,788  | 22,479  | 14,520                                | 15,254 U  |
| 121  | 0303127K  | Support of the National Communications System                 | 7   | 3,486   | 3,808   | 4,552                                 | 4,545 U   |
| 122  | 0303129K  | Defense Message System                                        | 7   |         | 1,353   |                                       | Þ         |
| 123  | 0303131K  | Minimum Essential Emergency Communications                    | 7   | 2,620   | 2,110   | 2,381                                 | 2,450 U   |
| 124  | 0303140D  | Information Systems Security Program                          | 7   | 16,514  |         |                                       | Þ         |
| 125  | 0303140G  | Information Systems Security Program                          | 7   | 189,019 | 201,895 | 258,593                               | 220,301 U |
| 126  | 03031493  | C41 for the Warrior                                           | 7   | 171     | 2,554   | 5,554                                 | 3,215 U   |
| 127  | 0303149K  | C4I for the Warrior                                           | 7   |         | 2,851   |                                       | Þ         |
| 128  | 0303153K  | Joint Spectrum Center                                         | 7   | 4,702   |         |                                       | Þ         |
|      |           |                                                               |     |         |         |                                       |           |

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Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1

| Appro | Appropriation: 0                        | 0400 D Research Development Test & Eval Defwide                        |             |                                                |                                      | Date: FEB 1997       | 1997      |
|-------|-----------------------------------------|------------------------------------------------------------------------|-------------|------------------------------------------------|--------------------------------------|----------------------|-----------|
|       | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$               | 1 1 1 1 1 1 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | ;<br>;<br>;<br>;<br>;<br>;<br>;<br>; | Thousands of Dollars |           |
|       |                                         |                                                                        | 1           |                                                |                                      |                      | S 4       |
| Line  | Element                                 |                                                                        | Act         | FY 1996                                        | FY 1997                              | FY 1998              | FY 1999 C |
| S.    | Namber                                  |                                                                        |             | 1 1 1 1 1                                      |                                      | 1                    |           |
| 129   | 0304345BQ                               | National Imagery and Mapping Program                                   | 7           |                                                |                                      |                      |           |
| 130   | 0305102BQ                               | Defense Imagery and Mapping Program                                    | 7           |                                                | 108,976                              | 109,430              | 162,664 U |
| 131   | 0305127V                                | Foreign Counterintelligence Activities                                 | 7           | 402                                            | 412                                  | 419                  | 418 U     |
| 132   | 0305139B                                | DMA Mapping, Charting, and Geodesy (MC&G)                              | 7           | 71,685                                         |                                      |                      | Þ         |
| 133   | 0305154D                                | Production System Improveme<br>Defense Airborne Reconnaissance Program | 7           | 600,653                                        | 469,335                              |                      | Þ         |
| 134   | 0305154G                                | Defense Airborne Reconnaissance Program                                | 7           |                                                | 3,459                                | 4,460                | 4,425 U   |
| 135   | 03051591                                | Defense Reconnaissance Support Activities (SPACE)                      | 7           | 54,769                                         | 78,280                               | 49,403               | 41,854 U  |
| 136   | 0305190D                                | C3I Intelligence Programs                                              | 7           | 11,077                                         | 668'9                                | 6,249                | 6,242 U   |
| 137   | 0305204D                                | Tactical UAVs                                                          | 7           |                                                |                                      | 122,004              | 42,052 U  |
| 138   | 0305205D                                | Endurance UAVs                                                         | 7           |                                                |                                      | 216,712              | 167,864 U |
| 139   | 0305206D                                | Airborne Reconnaissance Systems                                        | 7           |                                                |                                      | 212,961              | 169,217 U |
| 140   | 0305207D                                | Manned Reconnaissance Systems                                          | 7           |                                                |                                      | 27,784               | 11,133 U  |
| 141   | 0305208D                                | Distributed Common Ground Systems                                      | 7           |                                                |                                      | 37,653               | 33,897 U  |
| 142   | 0305209D                                | DARP Management Support                                                | 7           |                                                |                                      | 21,543               | 22,180 U  |
| 143   | 0305884L                                | Intelligence Planning and Review Activities                            | 7           |                                                |                                      |                      |           |
| 144   | 0305885G                                | Tactical Cryptologic Activities                                        | 7           | 103,577                                        | 986'66                               | 96,667               | 115,271 U |
| 145   | 0305889G                                | Counterdrug Intelligence Support                                       | 7           | 11,109                                         |                                      |                      | D         |
| 146   | 0305898L                                | Management Headquarters (Auxiliary Forces)                             | 7           | 10,423                                         | 1,849                                | 1,926                | 1,914 U   |
| 147   | 07080118                                | Industrial Preparedness                                                | 7           | 3,788                                          | 6,101                                | 8,720                | 8,732 п   |
| 148   | 09022983                                | Management Headquarters (OJCS)                                         | 7           | 3,999                                          | 10,012                               | 10,035               | л 908'6   |

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# Defensewide FY 1998/1999 R D T & E Program

|       |                           | מינים א הההדלסה בדינים                                          | r & Frogram |           | EXUIP                | Exhibit R-1 |
|-------|---------------------------|-----------------------------------------------------------------|-------------|-----------|----------------------|-------------|
| Appr  | opriation: (              | Appropriation: 0400 D Research Development Test & Eval Defwide  |             |           | Date: FEB 1997       | B 1997      |
|       | Program                   |                                                                 |             |           | Thousands of Dollars |             |
| Line  | Line Element<br>No Number | Item                                                            | Act FY 1996 | FY 1997   | FY 1998              | FY 1999 C   |
| 149   | 09027403                  | Joint Simulation System                                         | 4           | 21,054    | 24,321               | 25,179 U    |
| 150   | 10010175                  | Partnership for Peace Activities                                |             |           | 1,993                | 1,991 U     |
| 151   | 1160279BB                 | Small Business Innovative Research/Small Bus Tech               | 2,239       | 3,017     |                      | b           |
| 152   | 1160401BB                 | inabler Filor Frog<br>Special Operations Technology Development | 3,774       | 5,865     | 4,161                | 4,247 U     |
| 153   | 1160402BB                 | Special Operations Advanced Technology Developmen               | 14,515      | 7,602     | 8,009                | 8,171 U     |
| 154   | 1160404BB                 | Special Operations Tactical Systems Development                 | 105,201     | 93,855    | 73,073               | 86,216 U    |
| 155   | 1160405BB                 | Ø                                                               | 2,880       | 1,946     | 4,914                | 1,839 U     |
| 156   | 1160407BB                 | Development<br>SOF Medical Technology Development               | 1,747       | 1,803     | 2,029                | 2,077 U     |
| 157   | 1160408BB                 | SOF Operational Enhancements                                    | 16,646      | 28,177    | 26,357               | 13,790 U    |
|       | Operationa                | Operational Systems Development                                 | 2,110,174   | 2,212,596 | 2,374,612            | 2,240,620   |
| Total |                           | Research Development Test & Eval Defwide                        | 9,192,442   | 9,438,171 | 9,069,680            | 8,689,353   |
|       |                           |                                                                 |             |           |                      |             |

## Defensewide FY 1998/1999 R D T & E Program

Summary Date: FEB 1997

Exhibit R-1

| & Training                                |         |         | Date: FEB 1331       | /CCT C  |
|-------------------------------------------|---------|---------|----------------------|---------|
|                                           |         |         | Thousands of Dollars |         |
|                                           | FY 1996 | FY 1997 | FY 1998              | FY 1999 |
| Summary Recap of Budget Activities        |         |         |                      |         |
| nt Suppor                                 | 247,082 | 275,792 | 268,183              | 278,767 |
| Total Developmental Test & Eval, Defense  | 247,082 | 275,792 | 268,183              | 278,767 |
| Summary Recap of FYDP Programs            |         |         |                      |         |
| Research and Development (FYDP Program 6) | 247,082 | 275,792 | 268,183              | 278,767 |
| Total Developmental Test & Eval, Defense  | 247,082 | 275,792 | 268,183              | 278,767 |
|                                           |         |         |                      |         |

# Defensewide FY 1998/1999 R D T & E Program

Date: FEB 1997 Exhibit R-1 Appropriation: 0450 D Developmental Test & Eval, Defense

| r)                                      | συ                | Þ                                      | Þ                           | Þ                               |                          |                                          |
|-----------------------------------------|-------------------|----------------------------------------|-----------------------------|---------------------------------|--------------------------|------------------------------------------|
| Thousands of Dollars                    | EY 1999 C         | 138,793 U                              | 33,759 U                    | 106,215 U                       | 278,767                  | 278,767                                  |
| Thousands of Dollars                    | FY 1998           | 131,353                                | 33,836                      | 102,994                         | 268,183                  | 268,183                                  |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | FY 1997           | 142,809                                | 32,851                      | 100,132                         | 275,792                  | 275,792                                  |
|                                         | FY 1996           | 112,751                                | 32,195                      | 102,136                         | 247,082                  | 247,082                                  |
| -                                       | Act               | vo                                     | 9                           | 9                               |                          |                                          |
|                                         | Item              | Central Test and Evaluation Investment | Foreign Comparative Testing | Development Test and Evaluation | RDT&E Management Support | Total Developmental Test & Eval, Defense |
| Program                                 | Element<br>Number | 0604940D                               | 0605130D                    | 0605804D                        | RDT&E Mana               | Developme                                |
| ц                                       | Line E<br>No N    | -                                      | 7                           | က                               |                          | Total                                    |

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|             | Exhibit R-1                    |  |
|-------------|--------------------------------|--|
| Defensewide | FY 1998/1999 R D T & E Program |  |

|                                              |               |                   | Date: FEB 1997       |                   |
|----------------------------------------------|---------------|-------------------|----------------------|-------------------|
|                                              |               |                   | Thousands of Dollars |                   |
|                                              | 966           | FY 1997           | FY 1998              | FY 1999           |
| Summary Recap of Budget Activities           |               |                   |                      |                   |
| RDT&E Management Support                     | 22,587        | 24,219            | 23,384               | 23,447            |
|                                              | 1 1 1 1 1 1   | 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1        | 1 1 1 1 1 1 1 1 1 |
| Total Operational Test & Evaluation, Defense | 22,587        | 24,219            | 23,384               | 23,447            |
| Summary Recap of FYDP Programs               |               |                   |                      |                   |
| Research and Development (FYDP Program 6)    | 22,587        | 24,219            | 23,384               | 23,447            |
|                                              | 1 1 1 1 1 1 1 |                   | 1 1 1 1 1 1 1        |                   |
| Total Operational Test & Evaluation, Defense | 22,587        | 24,219            | 23,384               | 23,447            |
|                                              |               |                   |                      |                   |

# Defensewide FY 1998/1999 R D T & E Program

Exhibit R-1 Date: FEB 1997 Appropriation: 0460 D Operational Test & Evaluation, Defense

|       |           |                                              | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                      |                      |
|-------|-----------|----------------------------------------------|-----------------------------------------|-------------------|-----------------------------------------|----------------------|----------------------|
| Line  | Program   |                                              | !                                       |                   |                                         | Thousands of Dollars | Thousands of Dollars |
| No    | Number    | Item                                         | Act                                     | FY 1996           | FY 1997                                 | FY 1998              | FY 1999 C            |
| Н     | 0605118D  | Operational Test and Evaluation              | 9                                       | 12,183            | 11,437                                  | 13,187               | 13,216 U             |
| 77    | 0605131D  | Live Fire Testing                            | 9                                       | 10,404            | 12,782                                  | 10,197               | 10,231 U             |
|       | RDIGE Man | RDT&E Management Support                     |                                         | 22,587            | 24,219                                  | 23,384               | 23,447               |
| Total | Operation | Total Operational Test & Evaluation, Defense |                                         | 22,587            | 24,219                                  | 23,384               | 23,447               |
|       |           |                                              |                                         |                   |                                         |                      |                      |

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# Defense Mapping Agency FY 1998/1999 R D I & E Program

|                                         | Derense Mapping Agency<br>FY 1998/1999 R D T & E Program                   | Mapping Age<br>9 R D T & E                | program .                               |         | Exhib                                   | Exhibit R-1                           |
|-----------------------------------------|----------------------------------------------------------------------------|-------------------------------------------|-----------------------------------------|---------|-----------------------------------------|---------------------------------------|
| Appropriation                           | Appropriation: 0400 D Research Development Test & Eval Defwide             |                                           |                                         |         | Date: FEB 1997                          | 3 1997                                |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                                                                            | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | , f                                     |         | Thousands of Dollars                    | f Dollars                             |
| Program                                 |                                                                            | :                                         | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |         |                                         | 0 0                                   |
| No Number                               | Item                                                                       | Act                                       | FY 1996                                 | FY 1997 | FY 1998                                 | FY 1999 c                             |
|                                         |                                                                            | -                                         | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 | 1 1 1 1 1 1 1 1 1                       | 1 1 1 1 1                             |
| 132 0305139B                            | 3 DMA Mapping, Charting, and Geodesy (MC&G)<br>Production System Improveme | 7                                         | 71,685                                  |         |                                         | Þ                                     |
|                                         |                                                                            |                                           |                                         | 1 1 1 1 | 1 1 1 1 1 1 1 1                         | ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! |
| Operation                               | Operational Systems Development                                            |                                           | 71,685                                  |         |                                         |                                       |
|                                         |                                                                            |                                           |                                         |         | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                                       |
| Total Defense                           | Total Defense Mapping Agency                                               |                                           | 71,685                                  |         |                                         |                                       |
|                                         |                                                                            |                                           |                                         |         |                                         |                                       |

## Special Operations Command FY 1998/1999 R D T & E Program

Exhibit R-1 Date: FEB 1997 Appropriation: 0400 D Research Development Test & Eval Defwide

|       | Program    |                                                             |                                         | ;<br>;<br>;<br>;<br>;<br>;<br>;<br>;    | 1      | Thousands of Dollars                    | Dollars   |
|-------|------------|-------------------------------------------------------------|-----------------------------------------|-----------------------------------------|--------|-----------------------------------------|-----------|
| Line  |            |                                                             | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |        | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | S         |
| No    | Number     | Item                                                        | Act FY 1996                             | 196 FY 1997                             | 766    | FY 1998                                 | FY 1999 c |
| 151   | 1160279BB  | Small Business Innovative Research/Small Bus Tech           | 7 2,239                                 |                                         | 3,017  |                                         | Þ         |
| 152   | 1160401BB  | Special Operations Technology Development                   | 7 3,774                                 |                                         | 5,865  | 4,161                                   | 4,247 U   |
| 153   |            | 1160402BB Special Operations Advanced Technology Developmen | 7 14,515                                |                                         | 7,602  | 8,009                                   | 8,171 U   |
| 154   |            | 1160404BB Special Operations Tactical Systems Development   | 7 105,201                               |                                         | 93,855 | 73,073                                  | 86,216 U  |
| 155   | 1160405BB  | Special Operations Intelligence Systems<br>Development      | 7 2,880                                 |                                         | 1,946  | 4,914                                   | 1,839 U   |
| 156   | 1160407BB  | SOF Medical Technology Development                          | 7 1,747                                 |                                         | 1,803  | 2,029                                   | 2,077 U   |
| 157   | 1160408BB  | SOF Operational Enhancements                                | 7 16,646                                | 46 28,177                               | 177    | 26,357                                  | 13,790 U  |
|       | Operationa | Operational Systems Development                             | 147,002                                 | 02 142,265                              | 265    | 118,543                                 | 116,340   |
| Total |            | Special Operations Command                                  | 147,002                                 | 02 142,265                              |        | 118,543                                 | 116,340   |
|       |            |                                                             |                                         |                                         |        |                                         |           |

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Chemical and Biological Defense Program FY 1998/1999 R D T & E Program

Exhibit R-1

| pment Test & Eval Defwide | Thousands of Dollars                    | FY 1997 FY 1998 FY 1999 C |  |
|---------------------------|-----------------------------------------|---------------------------|--|
|                           | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | FY 1996                   |  |
| Develo                    |                                         | Act                       |  |
| : 0400 D Research         |                                         | Item                      |  |
| Appropriation: 0400 D     | Program                                 | Line Element<br>No Number |  |

|       |                              |                                                                |                |         |         | Thousands of | Dollars   |
|-------|------------------------------|----------------------------------------------------------------|----------------|---------|---------|--------------|-----------|
| Line  | Frogram<br>Element<br>Number | Item                                                           | Act            | FY 1996 | FY 1997 | FY 1998      | FY 1999 C |
| 9     | 0601384BP                    | Chemical and Biological Defense Program                        | <del>r l</del> | 26,528  | 29,325  | 25,190       | 26,018 U  |
|       | Basic Research               | arch                                                           |                | 26,528  | 29,325  | 25,190       | 26,018    |
| 15    | 0602384BP                    | Chemical and Biological Defense Program                        | 7              | 68,565  | 67,852  | 60,023       | 58,360 U  |
|       | Applied Research             | search                                                         |                | 68,565  | 67,852  | 60,023       | 58,360    |
| 33    | 0603384BP                    | Chemical and Biological Defense Program - Advanced Development | ю              | 26,896  | 43,092  | 41,223       | 40,581 U  |
|       | Advanced I                   | Advanced Technology Development                                |                | 26,896  | 43,092  | 41,223       | 40,581    |
| 83    | 0603884BP                    | Chemical and Biological Defense Program - Dem/Val              | m/Val 4        | 34,889  | 48,492  | 55,145       | 61,910 U  |
|       | Demonstrat                   | Demonstration and Validation                                   |                | 34,889  | 48,492  | 55,145       | 61,910    |
| 87    | 0604384BP                    | Chemical and Biological Defense Program - ER                   | EMD 5          | 89,606  | 97,476  | 120,535      | 108,006 υ |
|       | Engineerin                   | Engineering and Manufacturing Development                      |                | 909'68  | 97,476  | 120,535      | 108,006   |
| 105   | 0605384BP                    | Chemical and Biological Defense Program                        | 9              | 7,007   | 16,365  | 18,730       | 17,677 U  |
|       | RDT&E Mana                   | RDT&E Management Support                                       |                | 7,007   | 16,365  | 18,730       | 17,677    |
| Total |                              | Chemical and Biological Defense Program                        |                | 253,491 | 302,602 | 320,846      | 312,552   |

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## National Imagery And Mapping Agency FY 1998/1999 R D T & E Program

Exhibit R-1

e FY 1999 c 162,664 Thousands of Dollars Date: FEB 1997 FY 1998 109,430 FY 1997 108,976 1 1 1 1 1 1 1 1 FY 1996 Act 7 Appropriation: 0400 D Research Development Test & Eval Defwide 129 0304345BQ National Imagery and Mapping Program 130 0305102BQ Defense Imagery and Mapping Program Operational Systems Development Program Line Element No Number

Total National Imagery And Mapping Agency

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# Ballistic Missile Defense Organization FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation:   | 0400 D Research Development Test & Eval Defwide         |     |           |                                         | Date: FEB 1997 |           |
|------|------------------|---------------------------------------------------------|-----|-----------|-----------------------------------------|----------------|-----------|
|      | Drogram          |                                                         | 1   |           |                                         | Thousands of   | Dollars   |
| Line |                  | Item                                                    | Act |           | FV 1997                                 | πν 1998        |           |
|      |                  |                                                         |     |           | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                |           |
| σ    | 06021730         | Support Technologies - Applied Research                 | 7   | 96,092    | 102,510                                 | 101,932        | 95,488 U  |
|      | Applied Research | esearch                                                 |     | 96,092    | 102,510                                 | 101,932        | 95,488    |
| 29   | 0603173C         | Support Technologies - Advanced Technology Development  | т   | 130,611   | 251,294                                 | 147,557        | 144,902 U |
|      | Advanced         | Advanced Technology Development                         |     | 130,611   | 251,294                                 | 147,557        | 144,902   |
| 74   | 0603861C         | Theater High-Altitude Area Defense System - TMD -       | 4   | 565,818   | 341,307                                 | 294,647        | 16,778 U  |
| 75   | 06038630         | Dem/val<br>HAWK System BM/C3 - Dem/val                  | 4   | 22,819    |                                         |                | Þ         |
| 16   | 0603864C         | Theater Missile Defense BM/C3 - Dem/Val                 | 4   | 27,147    |                                         |                | Þ         |
| 77   | 06038670         | Navy Area Theater Missile Defense - Dem/Val             | 4   | 277,565   | 59,315                                  |                | Þ         |
| 78   | 06038680         | Navy Theater Wide Missile Defense - Dem/Val             | 4   | 200,442   | 304,171                                 | 194,898        | 192,073 U |
| 79   | 06038690         | Meads Concepts - Dem/Val                                | 4   | 20,123    | 56,232                                  | 47,956         | n 605'6   |
| 80   | 0603870C         | Boost Phase Intercept Theater Missile Defense           | 4   |           | 23,276                                  | 12,885         | D         |
| 81   | 0603871C         | Additional Missile Defense - Dem/Val                    | 4   | 730,656   | 828,864                                 | 504,091        | 393,085 U |
| 82   | 0603872C         | Joint Theater Missile Defense - Dem/Val                 | 4   | 429,137   | 506,492                                 | 542,619        | 514,109 U |
|      | Demonstra.       | Demonstration and Validation                            |     | 2,273,707 | 2,119,657                               | 1,597,096      | 1,125,554 |
| 89   | 0604861C         | Theater High-Altitude Area Defense System - TMD -       | 2   |           | 277,508                                 | 261,480        | 578,467 U |
| 90   | 0604864C         | Theater Missile Defense BM/C3 - EMD                     | 2   | 10,118    |                                         |                | D         |
| 91   | 0604865C         | Patriot PAC-3 Theater Missile Defense Acquisition - EMD | Ŋ   | 352,547   | 381,092                                 | 206,057        | 101,430 U |
| 92   | 0604866C         | PAC-3 Risk Reduction - EMD                              | 5   | 23,358    |                                         |                | D         |
|      |                  |                                                         |     |           |                                         |                |           |

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## Ballistic Missile Defense Organization FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr  | opriation:              | Appropriation: 0400 D Research Development Test & Eval Defwide |     |           |                            | Date: FEB 1997                          | IB 1997                                 |
|-------|-------------------------|----------------------------------------------------------------|-----|-----------|----------------------------|-----------------------------------------|-----------------------------------------|
| Line  | Program<br>Line Element |                                                                | 1   |           |                            | Thousands of Dollars                    | f Dollars                               |
| No    | Number                  | Item                                                           | Act | FY 1996   | FY 1997                    | FY 1998                                 | FY 1999 C                               |
| 93    | 0604867C                | Navy Area Theater Missile Defense - EMD                        | Ŋ   |           | 241,330                    | 267,822                                 | 226,748 U                               |
|       | Engineeri               | Engineering and Manufacturing Development                      |     | 386,023   | 899,930                    | 735,359                                 | 906,645                                 |
| 104   | 104 0605218C            | Ballistic Missile Defense RDT&E Program Management and Support | 9   | 158,748   |                            |                                         | D                                       |
|       | RDT&E Man               | RDT&E Management Support                                       |     | 158,748   | t<br>1<br>2<br>1<br>1<br>1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Total |                         | Ballistic Missile Defense Organization                         |     | 3,045,181 | 3,373,391                  | 2,581,944                               | 2,272,589                               |
|       |                         |                                                                |     |           |                            |                                         |                                         |

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# Office of Secretary/Defense FY 1998/1999 R D T & E Program

|      |                   | OIIICE OI SECTETATY/DETENSE<br>FY 1998/1999 R D T & B Progri            | retary/De<br>D T & E | Derense<br>E Program |         | Exhib        | Exhibit R-1 |
|------|-------------------|-------------------------------------------------------------------------|----------------------|----------------------|---------|--------------|-------------|
| Appr | ppropriation:     | Appropriation: 0400 D Research Development Test $\epsilon$ Eval Defwide |                      |                      |         | Date: FEB    | 1997        |
|      | Program           |                                                                         |                      |                      |         | Thousands of | of Dollars  |
| Line | Element<br>Number | Item                                                                    | Act                  | FY 1996              | FY 1997 | FY 1998      | FY 1999 C   |
| 1    | 1 0601101D        | In-House Laboratory Independent Research                                | ∺                    | 3,368                | 3,099   | 2,169        | 2,212 U     |
| e    | 3 0601103D        | University Research Initiatives                                         | щ                    | 214,876              | 214,696 | 237,788      | 247,188 U   |
| 4    | 1 0601110D        | Focused Research Initiatives                                            | н                    | 8,372                |         |              | Þ           |
| Ŋ    | 5 0601111D        | Government/Industry Cosponsorship of University Research                | Н                    |                      |         | 14,713       | 15,544 U    |
|      | Basic Research    | aarch                                                                   |                      | 226,616              | 217,795 | 254,670      | 264,944     |
| 80   | 3 0602160D        | Counterproliferation Support                                            | 7                    | 13,599               |         |              | D           |
| 10   | 0602227D          | Medical Free Electron Laser                                             | 2                    | 24,344               | 19,934  | 20,841       | 21,640 U    |
| 11   | L 0602228D        | ally Black C                                                            | 2                    | 13,572               | 10,876  | 11,485       | 14,664 U    |
| 12   | 0602234D          | (mbcu) Science and Engineer<br>Lincoln Laboratory Research Program      | 7                    | 13,730               | 19,554  | 20,474       | 21,147 U    |
| 20   | 0602787D          | Medical Technology                                                      | 7                    | 7,150                | 7,985   | 8,987        | 9,810 U     |
|      | Applied Research  | ssearch                                                                 |                      | 72,395               | 58,349  | 61,787       | 67,261      |
| 22   | 0603002D          | Medical Advanced Technology                                             | ю                    | 3,899                | 3,276   | 2,778        | 2,191 U     |
| 23   | 0603104D          | Explosives Demilitarization Technology                                  | ю                    | 14,265               | 11,754  | 12,259       | 12,541 U    |
| 24   | 0603105D          | Military HIV Research                                                   | ю                    | 18,589               |         |              | D           |
| 25   | 0603120D          | Demining                                                                | т                    |                      | 14,369  | 7,663        | 7,592 U     |
| 26   | 0603121D          | Alternative to Landmines                                                | ო                    |                      |         | 2,990        | 4,977 U     |
| 27   | 0603122D          | Counterterror Technical Support                                         | m                    | 16,656               | 21,098  | 34,863       | 37,057 U    |
| 28   | 0603160D          | Counterproliferation Support - Adv Dev                                  | ო                    | 61,680               | 57,108  | 58,264       | 57,496 U    |
| 30   | 0603225D          | Joint DoD-DoE Munitions Technology Development                          | ю                    | 20,675               | 17,743  | 16,141       | 16,354 U    |

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Office of Secretary/Defense FY 1998/1999 R D T & E Program

Exhibit R-1

| Research Development Test & Eval Defwide |
|------------------------------------------|
|------------------------------------------|

| Appr        | opriation: | Appropriation: 0400 D Research Development Test & Eval Defwide |     |                                         |                                                                                             | Date: FEB    | 3 1997    |
|-------------|------------|----------------------------------------------------------------|-----|-----------------------------------------|---------------------------------------------------------------------------------------------|--------------|-----------|
| !<br>!<br>! |            | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                        |     | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | ;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>; | Thousands of | Dollars   |
| Line        |            | i                                                              |     |                                         |                                                                                             |              |           |
| Q<br>Q      | Number     | ltem                                                           | Act | FY 1996                                 | FY 1997                                                                                     | FY 1998      | FY 1999 C |
| 32          | 0603232D   | Automatic Target Recognition                                   | т   |                                         | 4,716                                                                                       | 4,789        | 4,746 U   |
| 36          | 0603704D   | Special Technical Support                                      | ю   | 16,895                                  | 17,252                                                                                      | 11,750       | 11,896 U  |
| 39          | 0603716D   | Strategic Environmental Research Program                       | m   | 54,436                                  | 53,475                                                                                      | 54,874       | 57,185 U  |
| 40          | 0603726D   | Joint Technology Insertion Program                             | м   | 3,228                                   |                                                                                             |              | Þ         |
| 41          | . 0603727D | Joint Warfighting Program                                      | т   |                                         |                                                                                             | 14,172       | 22,833 U  |
| 42          | 0603728D   | Agile Port Demonstration                                       | m   |                                         | 4,897                                                                                       |              | D         |
| 43          | 3 0603729D | Rocket Launch Facility Upgrades                                | т   |                                         | 9,795                                                                                       |              | Þ         |
| 44          | 1 0603730D | Airfield Surface Traffic Monitoring                            | e   |                                         | 1,959                                                                                       |              | Ð         |
| 45          | 0603738D   | Cooperative DoD/VA Medical Research                            | т   | 23,283                                  | 21,334                                                                                      |              | D         |
| 51          | 1 0603750D | Advanced Concept Technology Demonstrations                     | ю   | 37,438                                  | 56,972                                                                                      | 121,076      | 139,458 U |
| 52          | 0603752D   | Commercial Technology Insertion Program                        | ю   |                                         | 9,744                                                                                       | 47,889       | 47,457 U  |
| 54          | 1 0603755D | High Performance Computing Modernization Program               | т   | 111,620                                 | 122,900                                                                                     | 126,211      | 148,852 U |
| 63          | 3 0603832D | Joint Wargaming Simulation Management Office                   | ю   | 72,183                                  | 59,331                                                                                      | 71,338       | 74,614 U  |
|             | Advanced   | Advanced Technology Development                                |     | 454,847                                 | 487,723                                                                                     | 587,057      | 645,249   |
| 19          | 7 0603228D | Physical Security Equipment                                    | 4   | 19,096                                  | 23,198                                                                                      | 31,553       | 32,536 U  |
| 68          | 3 0603708D | Integrated Diagnostics                                         | 4   | 9,540                                   | 9,492                                                                                       | 6,514        | 6,650 U   |
| 69          | 0603709D   | Joint Robotics Program                                         | 4   | 21,038                                  | 29,159                                                                                      | 23,196       | 24,694 U  |
| 70          | 0603714D   | Advanced Sensor Applications Program                           | 4   | 24,539                                  | 24,937                                                                                      | 15,379       | 15,744 U  |
| 71          | L 0603736D | CALS Initiative                                                | 4   | 24,476                                  | 15,527                                                                                      | 1,916        | 1,899 U   |
|             |            |                                                                |     |                                         |                                                                                             |              |           |

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## Office of Secretary/Defense FY 1998/1999 R D T & E Program

11,262 U 17,422 U 31,633 U 2,777 U 38,380 U Þ 40,355 U 1,692 U 448 U 1,859 U 8,508 FY 1999 31,633 94,019 110,207 Thousands of Dollars Date: FEB 1997 Exhibit R-1 1,738 FY 1998 107,306 357 13,584 15,164 55,429 55,429 38,376 2,690 37,474 5,979 7,047 93,661 2,252 1,586 182,619 45,943 FY 1997 9,744 21,587 48,975 2,583 43,360 30,447 2,673 39,707 11,108 8,343 96,116 3,700 6,322 2,647 FY 1996 21,840 25,257 174,320 57,886 73,147 30,251 2,464 43,772 27,239 1,456 115,628 28,534 12,614 Act ın S ø 9 ဖ 9 9 1 Small Business Innovative Research Administration Technical Support to USD(A) -- Critical Technology Joint Tactical Information Distribution System Environmental Security Technical Certification Appropriation: 0400 D Research Development Test & Eval Defwide Foreign Material, Acquisition and Exploitation Technical Studies, Support and Analysis 0303140D Information Systems Security Program Counterproliferation Support - EMD Small Business Innovative Research (JTIDS)
Counterdrug Intelligence Support Engineering and Manufacturing Development NATO Research and Development Counterproliferation Support Classified Program USD(P) Classified Programs - C3I Demonstration and Validation RDT&E Management Support Item Program ASAT 0603790D 0603851D 0604160D 0604771D 0305889D 0605104D 0605110D 0605710D 0603892D 0605117D 0605128D 0605160D 0605502D 0605790D Program Line Element No Number 88 72 73 86 96 106 108 109 124 84 100 102 103 97

Office of Secretary/Defense FY 1998/1999 R D T & E Program

|       |                           | OILICE OI SECLECALY/DELENSE<br>FY 1998/1999 R D T & E Program  | RDT & E | Program   |             | Exhibit R-1          | t R-1     |
|-------|---------------------------|----------------------------------------------------------------|---------|-----------|-------------|----------------------|-----------|
| Appro | priation: (               | Appropriation: 0400 D Research Development Test & Eval Defwide |         |           |             | Date: FEB 1997       |           |
|       |                           |                                                                |         |           |             | Thousands of Dollars | Dollars   |
| Line  | Line Element<br>No Number | Item                                                           | Act     | FY 1996   | FY 1997     | FY 1998              | FY 1999 G |
| 133   | 133 0305154D              | Defense Airborne Reconnaissance Program                        | 7       | 600,653   | 469,335     |                      | D         |
| 136   | 136 0305190D              | C31 Intelligence Programs                                      | 7       | 11,077    | 6 6 8 6 9 9 | 6,249                | 6,242 U   |
| 137   | 0305204D                  | Tactical UAVs                                                  | 7       |           |             | 122,004              | 42,052 U  |
| 138   | 0305205D                  | Endurance UAVs                                                 | 7       |           |             | 216,712              | 167,864 U |
| 139   | 0305206D                  | Airborne Reconnaissance Systems                                | 7       |           |             | 212,961              | 169,217 U |
| 140   | 0305207D                  | Manned Reconnaissance Systems                                  | 7       |           |             | 27,784               | 11,133 U  |
| 141   | 0305208D                  | Distributed Common Ground Systems                              | 7       |           |             | 37,653               | 33,897 U  |
| 142   | 0305209D                  | DARP Management Support                                        | 7       |           |             | 21,543               | 22,180 U  |
|       | Operation                 | Operational Systems Development                                |         | 628,244   | 476,234     | 644,906              | 452,585   |
| Total |                           | Office of Secretary/Defense                                    |         | 1,745,197 | 1,564,779   | 1,804,816            | 1,665,898 |

# Defense Advanced Research Projects Agcy FY 1998/1999 R D T & E Program

Exhibit R-1

| Appr | Appropriation:   | 0400 D Research Development Test & Eval Defwide |     |                                                     |                                         | Date: FEB 1997                                           | 1997        |
|------|------------------|-------------------------------------------------|-----|-----------------------------------------------------|-----------------------------------------|----------------------------------------------------------|-------------|
|      |                  |                                                 |     |                                                     |                                         | Thousands of Dollars                                     | r<br>r<br>r |
| Line | Flement          |                                                 | 1   | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | ;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>;<br>; | S 0         |
| No   |                  | Item                                            | Act | FY 1996                                             | FY 1997                                 | FY 1998                                                  | FY 1999 C   |
| 7    | 0601101E         | Defense Research Sciences                       | ⊣   | 76,459                                              | 90,701                                  | 76,009                                                   | 80,936 U    |
|      | Basic Research   | arch                                            |     | 76.459                                              | 90.701                                  | 76.009                                                   | 36.08       |
| 7    | 0602110E         | Next Generation Internet                        | 0   |                                                     |                                         | 40.000                                                   | 40.000 11   |
| 13   | 0602301E         | Computing Systems and Communications Technology | . 7 | 361,528                                             | 314,969                                 | 341,752                                                  |             |
| 14   | 0602383E         | Biological Warfare Defense                      | 7   |                                                     |                                         | 61,600                                                   | 61,800 U    |
| 16   | 0602702更         | Tactical Technology                             | 2   | 120,440                                             | 121,520                                 | 157,329                                                  | 177,995 U   |
| 17   | 0602708E         | Integrated Command and Control Technology       | 7   | 44,395                                              | 59,672                                  | 37,000                                                   | 40,000 U    |
| 18   | 0602712E         | Materials and Electronics Technology            | 7   | 227,848                                             | 213,843                                 | 192,192                                                  | 236,730 U   |
|      | Applied Research | search                                          |     | 754,211                                             | 710,004                                 | 829,873                                                  | 927,996     |
| 31   | 0603226E         | Experimental Evaluation of Major Innovative     | Э   | 580,359                                             |                                         |                                                          | Þ           |
| 34   | 0603569E         | reconologies<br>Advanced Submarine Technology   | ю   | 30,797                                              |                                         |                                                          | Þ           |
| 35   | 0603570E         | Defense Reinvestment                            | ю   | 177,852                                             |                                         |                                                          | Þ           |
| 46   | 0603739E         | Advanced Electronics Technologies               | m   | 389,610                                             | 360,288                                 | 277,044                                                  | 282,668 U   |
| 47   | 0603744E         | Advanced Simulation                             | ю   | 4,809                                               |                                         |                                                          | Д           |
| 48   | 0603745E         | Semiconductor Manufacturing Technology          | е   | 85,014                                              |                                         |                                                          | п           |
| 49   | 0603746E         | Maritime Technology                             | ю   | 46,351                                              | 49,021                                  | 37,408                                                   | 12,592 U    |
| 20   | 0603747E         | Electric Vehicles                               | ٣   | 14,694                                              | 14,707                                  |                                                          | D           |
| 52   | 0603760巨         | Command, Control and Communications Systems     | m   |                                                     | 102,996                                 | 163,800                                                  | 172,600 U   |
| 56   | 0603761E         | Communication and Simulation Technology         | ю   |                                                     | 127,080                                 | 75,938                                                   | 72,114 U    |

UNCLASSIFIED

## Defense Advanced Research Projects Agcy FY 1998/1999 R D T & E Program

Exhibit R-1

FY 1998/1999 R D T & E Program

| Appro | priation:               | Appropriation: 0400 D Research Development Test & Eval Defwide |                                         |           | Date: FEB 1997                          | B 1997    |
|-------|-------------------------|----------------------------------------------------------------|-----------------------------------------|-----------|-----------------------------------------|-----------|
|       |                         |                                                                |                                         |           | Thousands of Dollars                    | !<br>!    |
| Line  | Program<br>Line Element |                                                                | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |           | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | S         |
| No    | Number                  | Item A                                                         | Act FY 1996                             | FY 1997   | FY 1998                                 | FY 1999 C |
| 57    | 0603762E                | Sensor and Guidance Technology                                 | 8                                       | 108,360   | 166,855                                 | 200,582 U |
| 28    | 0603763E                | Marine Technology                                              |                                         | 40,976    | 69,143                                  | 88,788 U  |
| 59    | 0603764E                | Land Warfare Technology                                        |                                         | 63,222    | 82,580                                  | Д 868'96  |
| 09    | 0603765E                | Classified DARPA Programs                                      |                                         | 178,040   | 134,977                                 | 65,500 U  |
| 61    | 0603800E                | Joint Strike Fighter (JSF) - Dem/Val                           | 3 28,917                                | 72,865    | 23,900                                  | n         |
| 62    | 0603805E                | Dual Use Applications Programs                                 |                                         | 181,184   | 225,000                                 | 225,000 U |
|       | Advanced                | Advanced Technology Development                                | 1,358,403                               | 1,298,739 | 1,256,645                               | 1,216,742 |
| 66    | 0605114E                | BLACK LIGHT                                                    | 6 4,623                                 | 4,638     | 4,683                                   | 5,000 U   |
| 107   | 0605502E                | Small Business Innovative Research                             | 6 42,390                                |           |                                         | Þ         |
| 113   | 0605898E                | Management Headquarters (Research and Development              | 33,116                                  | 36,354    | 39,193                                  | 41,260 U  |
|       | RDT&E Mar               | RDI&E Management Support                                       | 80,129                                  | 40,992    | 43,876                                  | 46,260    |
| Total |                         | Defense Advanced Research Projects Agcy                        | 2,269,202                               | 2,140,436 | 2,206,403                               | 2,271,934 |

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## National Security Agency FY 1998/1999 R D T & E Program

|       |                           | Nacional Seculity Agency<br>FY 1998/1999 R D T & E Program     | DI & E | Program                                 |                                         | Exhib                      | Exhibit R-1                             |
|-------|---------------------------|----------------------------------------------------------------|--------|-----------------------------------------|-----------------------------------------|----------------------------|-----------------------------------------|
| Appro | Appropriation:            | Appropriation: 0400 D Research Development Test & Eval Defwide |        |                                         |                                         | Date: FEB 1997             | B 1997                                  |
|       | Program                   |                                                                |        |                                         |                                         | Thousands of Dollars       |                                         |
| Line  | Line Element<br>No Number | Item                                                           | Act    |                                         | FY 1997                                 | FY 1998                    | FY 1999 C                               |
| 64    | 03031326                  | Global Grid Communications                                     | ε      |                                         |                                         |                            |                                         |
| 65    | 0304211G                  | National Activities                                            | ю      |                                         |                                         |                            |                                         |
| 99    | 0305166G                  | Special Development                                            | ю      |                                         |                                         |                            |                                         |
|       | Advanced                  | Advanced Technology Development                                |        |                                         | t : : : : : : : : : : : : : : : : : : : | 3<br>6<br>8<br>8<br>8<br>8 | # : : : : : : : : : : : : : : : : : : : |
| 116   | 0301011G                  | Cryptologic Activities                                         | 7      |                                         |                                         |                            |                                         |
| 125   | 0303140G                  | Information Systems Security Program                           | 7      | 189,019                                 | 201,895                                 | 258,593                    | 220,301 U                               |
| 134   | 0305154G                  | Defense Airborne Reconnaissance Program                        | 7      | 3,450                                   | 3,459                                   | 4,460                      | 4,425 U                                 |
| 144   | 0305885G                  | Tactical Cryptologic Activities                                | 7      | 103,577                                 | 986'66                                  | 96,667                     | 115,271 U                               |
| 145   | 0305889G                  | Counterdrug Intelligence Support                               | 7      | 11,109                                  |                                         |                            | Þ                                       |
|       | Operation                 | Operational Systems Development                                |        | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1              |                                         |
| Total |                           | National Security Agency                                       |        | 1 1 1 1                                 | 8<br>6<br>8<br>8<br>8                   | 1<br>1<br>2<br>1<br>1      | 1<br>1<br>2<br>1<br>1<br>1<br>1         |

|            |                  | Defense Special Weapons Agency<br>FY 1998/1999 R D T & E Program | efense Special Weapons Agency<br>FY 1998/1999 R D T & E Program | Agency<br>Program |         | Exhib                | Exhibit R-1 |
|------------|------------------|------------------------------------------------------------------|-----------------------------------------------------------------|-------------------|---------|----------------------|-------------|
| Appro      | priation:        | Appropriation: 0400 D Research Development Test & Eval Defwide   |                                                                 |                   |         | Date: FEB 1997       | B 1997      |
|            | Program          |                                                                  |                                                                 |                   |         | Thousands of Dollars | f Dollars   |
| Line No No | Element          | Item                                                             | Act                                                             | FY 1996           | FY 1997 | FY 1998              | FY 1999 C   |
| 19         | 0602715H         | Defense Special Weapons Agency                                   | 8                                                               | 227,320           | 192,298 | 211,971              | 221,702 U   |
|            | Applied Research | Nesearch                                                         |                                                                 | 227,320           | 192,298 | 211,971              | 221,702     |
| 37         | 0603711H         | Verification Technology Demonstration                            | е                                                               | 32,308            | 25,485  | 83,370               | 50,232 U    |
|            | Advanced         | Advanced Technology Development                                  |                                                                 | 32,308            | 25,485  | 83,370               | 50,232      |
| Tota.      | l Defense        | Total Defense Special Weapons Agency                             |                                                                 | 259,628           | 217,783 | 295,341              | 271,934     |

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Defense Support Project Office FY 1998/1999 R D T & E Program

Exhibit R-1 Date: FEB 1997 Appropriation: 0400 D Research Development Test & Eval Defwide

| Ś                    | 0 0                       | Þ                                                                |                                 |                                |
|----------------------|---------------------------|------------------------------------------------------------------|---------------------------------|--------------------------------|
| f Dollars            | FY 1999 C                 | 41,854 U                                                         | 41,854                          | 41,854                         |
| Thousands of Dollars | FY 1998                   | 49,403                                                           | 49,403                          | 49,403                         |
|                      | FY 1997                   | 78,280                                                           | 78,280                          | 78,280                         |
|                      | FY 1996                   | 54,769                                                           | 54,769                          | 54,769                         |
| 1                    | Act                       | 7                                                                |                                 |                                |
|                      |                           | (SPACE)                                                          |                                 |                                |
|                      | Item                      | 135 03051591 Defense Reconnaissance Support Activities (SPACE) 7 | Operational Systems Development | Defense Support Project Office |
| Program              | Mumber                    | 03051591                                                         | Operation                       | Defense (                      |
|                      | Line Elemeni<br>No Number | 135 (                                                            | J                               | Total                          |

# Joint Chiefs of Staff FY 1998/1999 R D T & E Program

Exhibit R-1

| 1440  | Opt ractom:                          | 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1            | 1 1 1 1 1 1 |                                         |         |                                         |           |
|-------|--------------------------------------|---------------------------------------------------|-------------|-----------------------------------------|---------|-----------------------------------------|-----------|
|       |                                      |                                                   |             |                                         |         | Thousands of Dollars                    | Dollars   |
| Line  | Program<br>Line Element<br>No Number | Item                                              | Act         | FY 1996                                 | FY 1997 | FY 1998                                 | FY 1999 C |
| 85    | 0208043J                             | ISLAND SUN                                        | 4           | 1,356                                   | 1,216   |                                         | D         |
|       | Demonstrat                           | Demonstration and Validation                      |             | 1,356                                   | 1,216   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |           |
| 101   | 0605126J                             | Joint Theater Air and Missile Defense Organizatio | io 6        |                                         |         | 23,100                                  | 17,850 U  |
|       | RDIGE Manag                          | RDI&E Management Support                          |             | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1       | 23,100                                  | 17,850    |
| 115   | 02080523                             | Joint Analytical Model Improvement Program        | 7           |                                         | 1,000   | 2,186                                   | 1,883 U   |
| 126   | 0303149J                             | C4I for the Warrior                               | 7           | 171                                     | 2,554   | 5,554                                   | 3,215 U   |
| 148   | 0902298J                             | Management Headquarters (OJCS)                    | 7           | 3,999                                   | 10,012  | 10,035                                  | 9'806 π   |
| 149   | 09027403                             | Joint Simulation System                           | 7           |                                         | 21,054  | 24,321                                  | 25,179 U  |
| 150   | 1001001                              | Partnership for Peace Activities                  | 7           |                                         |         | 1,993                                   | 1,991 U   |
|       | Operationa                           | Operational Systems Development                   |             | 4,170                                   | 34,620  | 44,089                                  | 42,074    |
| Total |                                      | Joint Chiefs of Staff                             |             | 5,526                                   | 35,836  | 67,189                                  | 59,924    |
|       |                                      |                                                   |             |                                         |         |                                         |           |

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Defense Information Systems Agency FY 1998/1999 R D T & E Program

|       |                  | FY 1998/1999 R D T & E Program                    | E S E C | E Program |         | Exhibit R-1          | it R-1    |
|-------|------------------|---------------------------------------------------|---------|-----------|---------|----------------------|-----------|
| Appr  | Appropriation:   | 0400 D Research Development Test & Eval Defwide   |         |           |         | Date: FEB            | 3 1997    |
|       | Drogram          |                                                   |         |           |         | Thousands of Dollars | f Dollars |
| Line  |                  | Item                                              | Act     | FY 1996   | FY 1997 | FY 1998              | FY 1999 C |
| 21    | 0305108K         | Command and Control Research                      | 7       | 1,705     | 1,814   | 1,937                | 2,013 U   |
|       | Applied Research | search                                            |         | 1,705     | 1,814   | 1,937                | 2,013     |
| 114   | 0208045K         | C3 Interoperability                               | 7       | 24,712    | 24,941  | 25,670               | 26,648 U  |
| 118   | 0302016K         | National Military Command System-Wide Support     | 7       | 1,995     | 1,978   | 2,064                | 2,099 U   |
| 119   | 0302019K         | Joint/Defense Information Systems Engineering and | 7       | 3,622     | 4,468   | 4,721                | 4,971 U   |
| 120   | 0303126K         | Inceptation Long-Haul Communications (DCS)        | 7       | 17,788    | 22,479  | 14,520               | 15,254 U  |
| 121   | 0303127K         | Support of the National Communications System     | 7       | 3,486     | 3,808   | 4,552                | 4,545 U   |
| 122   | 0303129K         | Defense Message System                            | 7       |           | 1,353   |                      | Þ         |
| 123   | 0303131K         | Minimum Essential Emergency Communications        | 7       | 2,620     | 2,110   | 2,381                | 2,450 U   |
| 127   | 0303149K         | Network (MEECN)                                   | 7       |           | 2,851   |                      | Þ         |
| 128   | 0303153K         | Joint Spectrum Center                             | 7       | 4,702     |         |                      | D         |
|       | Operation        | Operational Systems Development                   |         | 58,925    | 63,988  | 53,908               | 55,967    |
| Total |                  | Defense Information Systems Agency                |         | 60,630    | 65,802  | 55,845               | 57,980    |

# Defense Intelligence Agency FY 1998/1999 R D T & E Program

Exhibit R-1

e FY 1999 c 1,914 U Thousands of Dollars Date: FEB 1997 FY 1998 1,926 FY 1997 1,849 FY 1996 10,423 Appropriation: 0400 D Research Development Test & Eval Defwide Act Intelligence Planning and Review Activities Management Headquarters (Auxiliary Forces) General Defense Intelligence Program Operational Systems Development Item 143 0305884L 117 0301301L 146 0305898L Program Line Element No Number

Total Defense Intelligence Agency

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## Central Imagery Office FY 1998/1999 R D T & E Program

|      |                                       | FY 1998/1999 R D T & E Program            | RDTEE | Program                                 |                                         | EXPIDIT K-I          | T K-I                                   |
|------|---------------------------------------|-------------------------------------------|-------|-----------------------------------------|-----------------------------------------|----------------------|-----------------------------------------|
| Appr | opriation: 0                          | ment Test &                               |       |                                         |                                         | Date: FEB 1997       | 1997                                    |
|      | • • • • • • • • • • • • • • • • • • • | 1<br> <br> -<br> -<br> -                  |       |                                         |                                         | Thousands of Dollars | Dollars                                 |
|      | Program                               |                                           | :     | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | S) (4)               | 8                                       |
| Line | Line Element<br>No Number             | Item                                      | Act   | FY 1996                                 | FY 1997                                 | FY 1998              | FY 1999 C                               |
|      |                                       |                                           | !     | 1 1 1                                   | 1 1 1 1 1                               |                      | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| 94   | 0305106LC                             | 0305106LC Consolidated Imagery Activities | 2     |                                         |                                         |                      |                                         |
| 95   | 0305107LC                             | 0305107LC Tactical Imagery Activities     | 2     |                                         |                                         |                      |                                         |
|      |                                       |                                           |       |                                         | 1 1 1 1                                 | 1 1 1 1              |                                         |
|      | Engineerit                            | Engineering and Manufacturing Development |       |                                         |                                         |                      |                                         |
|      |                                       |                                           |       |                                         | 1 1 1 1 1 1 1 1 1                       | 1 1 1 1 1 1 1        | 1 1 1 1 1 1                             |
| Tota | Central                               | motal Central Imagery Office              |       |                                         |                                         |                      |                                         |

## Defense Logistics Agency FY 1998/1999 R D T & E Program

Exhibit R-1

| Appro      | priation:                 | Appropriation: 0400 D Research Development Test & Eval Defwide |     |         |         | Date: FEB 1997       | 1997      |
|------------|---------------------------|----------------------------------------------------------------|-----|---------|---------|----------------------|-----------|
|            | Program                   |                                                                |     |         |         | Thousands of Dollars | Dollars   |
| Line<br>No | Line Element<br>No Number | Item                                                           | Act | FY 1996 | FY 1997 | FY 1998              | EY 1999 C |
| 38         | 06037128                  | Generic Logistics R&D Technology Demonstrations                | ю   | 13,883  | 19,357  | 17,267               | 17,788 U  |
| 53         | 06037538                  | Electronic Commerce Resource Centers                           | т   |         |         | 14,972               | D         |
|            | Advanced                  | Advanced Technology Development                                |     | 13,883  | 19,357  | 32,239               | 17,788    |
| 51 S       | 06057988                  | Defense Support Activities                                     | 9   | 16,858  | 13,121  | 5,992                | 0,056 U   |
| 111        | 06058018                  | Defense Technical Information Center                           | 9   | 39,950  | 43,382  | 46,930               | 48,171 U  |
| 112        | 06058038                  | R&D in Support of DoD Enlistment, Testing and Evaluation       | 9   |         | 1,887   | 8,285                | 8,410 U   |
|            | RDT&E Man                 | RDT&E Management Support                                       |     | 56,808  | 58,390  | 61,207               | 62,637    |
| 147        | 07080118                  | Industrial Preparedness                                        | 7   | 3,788   | 6,101   | 8,720                | 8,732 U   |
|            | Operation                 | Operational Systems Development                                |     | 3,788   | 6,101   | 8,720                | 8,732     |
| Total      |                           | Defense Logistics Agency                                       |     | 74,479  | 83,848  | 102,166              | 89,157    |

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Defense Investigative Service FY 1998/1999 R D T & E Program

Exhibit R-1

| Appropriatio | Appropriation: 0400 D Research Development Test & Eval Defwide |     | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Date: FEB 1997 | 3 1997    |
|--------------|----------------------------------------------------------------|-----|-----------------------------------------|-----------------------------------------|----------------|-----------|
| Line Elem    | Figural                                                        |     |                                         |                                         | S              | 8         |
| No Number    | Item                                                           | Act | FY 1996                                 | FY 1997                                 | FY 1998        | FY 1999 c |
| 131 0305127V | 05127V Foreign Counterintelligence Activities                  | 7   | 402                                     | 412                                     | 419            | 418 U     |
| Ope          | Operational Systems Development                                |     | 402                                     | 412                                     | 419            | 418       |
| Total De     | Total Defense Investigative Service                            |     | 402                                     | 412                                     | 419            | 418       |